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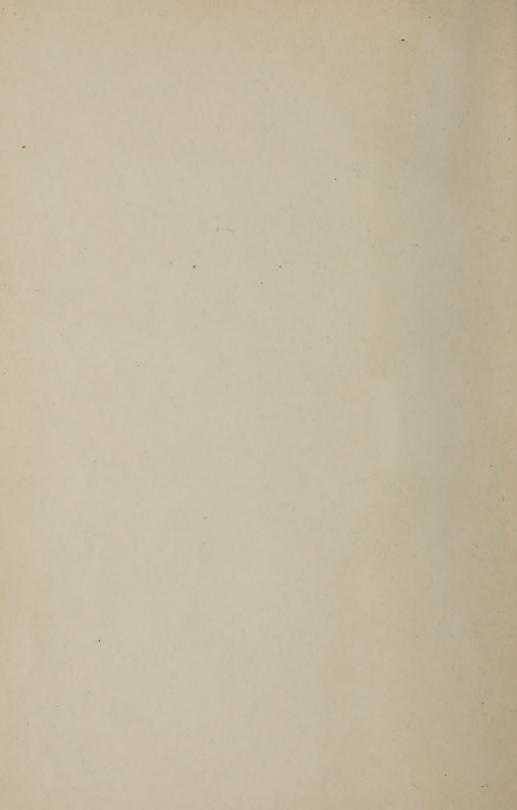






MUSEUM IDEALS OF PURPOSE AND METHOD

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MUSEUM IDEALS OF PURPOSE AND METHOD

BENJAMIN IVES GILMAN



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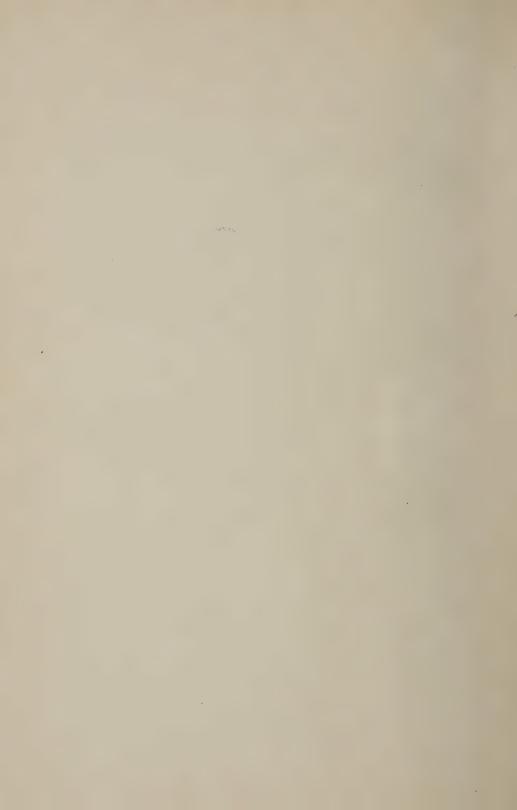
Mr. Benjamin Ives Gilman, the author of "Museum Ideals of Purpose and Method," has long held the office of Secretary of this Museum. In recognition of Mr. Gilman's mature thought upon the theory and practice of museum administration, the Trustees are very glad to authorize the inclusion of the book among Museum publications.

October, 1917.



TO THE MEMORY OF
SAMUEL DENNIS WARREN
JANUARY 25 1852—FEBRUARY 19 1910
PRESIDENT OF THE MUSEUM OF FINE ARTS
1901–1906

MOVING SPIRIT IN THE PROJECT
FOR ITS PRESENT BUILDING
BOLD LEADER ACUTE COUNSELLOR
FAITHFUL FRIEND



PREFACE

THE writer desires to acknowledge with gratitude the kindness of the Trustees of the Museum which he serves in authorizing the inclusion of this book among Museum publications.

At a recent meeting of the American Astronomical Society Professor Edward C. Pickering is reported as saying: "A great deal has been done by wealthy men in providing equipment and plants for the study of astronomy, but the important thing for the future is to use money for the increasing of efficiency and obtaining results. We have enough plants, we now want greater results." A similar situation at the moment confronts museums in America. Wealthy men have done a great deal in providing collections and buildings to house them; but the important thing for the future is to use money for increasing the efficiency of these acquisitions, and obtaining results from them. Growth has been the paramount care hitherto of our museums. The use of growth needs to become their paramount care instead.

As a matter of convenience collections of science and collections of art are alike called museums. Yet it may be claimed both that collections of art have a better right to the title, and that a radical difference between them calls for the independent naming of collections of science. Although there were no muses of painting or sculpture, it was the realm of fancy over which the sisters presided, and not the domain of fact. Moreover, as exhibits, objects of art serve a purpose for which they were intended, and objects of science a purpose for which they were not

— the purpose, namely, of being inspected by beholders. Objects of art were made to be looked at, and looked at they are accordingly. Objects of science were not made to be looked at, and looked at they are, nevertheless. The scientific collection, as the less natural type of exhibition, calls for an independent name. But in default of any convenient term, we shall doubtless continue to use the phrase "museum of science" in spite of its contradiction, and "museum of art" in spite of its redundancy.

For an intelligent decision as to the use of growth in museums etymologically so-called, or public collections of fine art, we should know, first, what are the results at which these institutions aim, and, second, how such results may most effectively be obtained. The present book is a contribution toward replies to these two questions: first, regarding museum purposes; second, regarding museum methods.

The editor of the Burlington Magazine, in an article on "Museums" in the issue for September 15, 1908, wrote: "The time has arrived when the question of exactly what their function is, and what it ought to be, must be asked and solved. Boston must have the honor of having been the first place where this question has attracted serious attention; and where in the building of the new museum it is understood that a new solution of the problem is to be exemplified." Boston may accept this testimony with due humility, and may rejoice that in its present museum building the solution which the Burlington states and commends as the "esthetic ideal" has been permanently expressed in granite and marble. With its piano nobile devoted to exhibition, and its basement set apart for study, the structure proclaims that the controlling purpose of a museum of art is æsthetic, its subordinate purpose scientific. In pursuance of the expressed aim of Samuel

Dennis Warren, then President of the Museum, to make it "possible for all who would to work together toward a common end," all four methods known to inquiry were utilized in reaching a museum scheme embodying this fundamental principle: experience, derived from a generation of museum work, experiment, in a specially constructed building, observation, by a commission travelling in Europe, and study, devoted to the existing literature of museum planning. It is in Boston again that the æsthetic ideal has first received explicit official statement. The Annual Report for 1916 of Mr. Morris Gray, President of the Museum, sets a milestone in the history of the management of museums of art by its definite recognition that the duty of providing for the proper enjoyment of their acquisitions is their fundamental duty and now the pressing one. Time has fully verified the assumption of the founders of the Museum "that the Museum is to be what its name expresses, a Museum of the Fine Arts; that its primary object is to collect and exhibit the best obtainable works of genius and skill; that the application of the fine arts to industry and the illustration of the fine arts by archæology are both within its province. but that neither of these is its first object." 1

The first section of this book presents a reasoned plea from various angles in support of the æsthetic ideal, under the title of the *Ideal of Culture*. It is argued that a museum of art is primarily an institution of culture and only secondarily a seat of learning.

The identity of culture with artistic enjoyment is by no means an accepted commonplace among us; nor is the distinction between culture and education by any means clearly drawn by all of those who use the words. It is here

¹ Eighth Annual Report of the Trustees of the Museum of Fine Arts, Boston (1883), p. 12.

assumed that culture consists at bottom in the spiritual process of liking things that other people before us have made to their liking, whether these things are habits of speech or behavior, political institutions, or the things we narrowly call works of fine art. More closely defined, in harmony with modern usage, culture means sharing in such likings as have an authoritative basis of one kind or another, and are thus representatives of what we call standards of taste. According to this definition culture and education differ doubly. Culture is an affair of the feelings, of what are called the "sensibilities." Education may train the sensibilities, but it may also train other capacities, bodily or mental. Moreover, the sensibilities without training are often capable of the sympathetic response we call culture. While the scope of education extends beyond culture, culture is in a measure independent of education. Not all education is cultivating, and not all culture is educated. Each term in its way covers more than the other.

Among opportunities of culture, of liking things that others have made to their liking, works of fine art are preëminent. We are indeed pardonable in naming them alone. A museum is an institution devoted to preserving certain of these works which are still likable, although not usable as they once were. The ideal of museum purpose here called that of culture affirms that such institutions ought to offer their contents primarily for the exercise of the likings they illustrate, or less abstractly, for the enjoyment of their beauty.

This is an ideal at once true and needing to be preached among us. It is true, because a museum object is apt to be more valuable as an opportunity of enjoyment than for any other purpose. Being among the things that others have made to their liking, when we like it in turn, we aid it to accomplish that one of its native purposes which it can still subserve in its new surroundings; and anything is apt to be more valuable for a purpose for which it was made than for any other. Thus a museum of fine art which regards and treats its acquisitions as primarily things to be enjoyed, opportunities of culture, gives their chief present value the chief place, as it should.

Further, the ideal of culture needs to be preached among us. A generation ago an American writer of distinction, speaking of our elaborately instructed classes, called their culture "a hollow mockery." This was, and is still, a fact in the sense that, just as no one could possibly be so wise as Lord Thurlow looked, so no one could possibly be as cultivated as some people among us are supposed to be. The literature, the music, painting and sculpture, the institutions, the customs, the manners, which even the most favorably placed and receptive beholder can ever come to like as their creators liked them. make up a comparatively small aggregate for each individual. In defiance of this personal limit it is the effort of our higher instruction to accomplish a more or less complete humanization of every one subjected to it. What it aims at is a broad culture — the reawakening of at least the standard enthusiasms of the race in every new student. What it accomplishes is at best to expose him to sources of inspiration many of which he is incapable of responding to except mechanically. Hence among our elaborately instructed classes an abundant growth of hollow mockeries of culture. Hence an intellectual snobbery which, instead of actually liking things, likes only to seem to like them. Hence among the population generally an almost total ignorance of what culture really is. and a well-nigh universal identification of it either with the factitious enthusiasms which are the most conspicuous product of an instruction that aims at it, or with this instruction itself. Against these popular delusions museums of fine art, as conservators of some of the chief instrumentalities of culture, are called to fight. In a land which has hardly yet begun to endow music and the drama, they are almost the sole foundations representative of culture as distinguished from education; and need to assert themselves as such. In our larger communities especially, from the beginning homes of the higher instruction, the doctrine that enjoyment is the chief aim of museums of art, instruction a secondary aim, needs to be preached as this book seeks to preach it.

The painter Fromentin once wrote: "Le temps ne respecte pas ce qu'on a fait sans lui." "Time does not respect what is done without his aid." This book has been written during intervals of reflection upon a busy official career and has occupied eighteen years in the writing. Time having been conciliated so far, may perhaps respect it until its conclusions have been fairly and widely weighed. This is not so modest a hope as it sounds. Fairly to weigh any new doctrines means to assimilate their element of truth and to reject their element of error. As William James noted, we assimilate new truth in three steps. We are first inclined to say, "It is absurd"; then, "It is sensible but not novel"; and finally, "I have long thought so myself." When this third stage is reached, and not before, a truth has been assimilated and is ready to issue in action. Joubert wrote, "No one knows anything well unless he has known it a long time";1 and Holmes, "knowledge and timber should n't be used much until they are seasoned." 2 The hope that the seven ideals of this book will be fairly and widely weighed — the element of truth in them domesticated and seasoned in our

¹ Pensées.

² Autocrat of the Breakfast-Table.

minds — before the volume is forgotten, is an ambitious hope rather than a modest one. If the ideal of Culture, though true, still needs to be preached among us, no little time must elapse before it will become a part of the general museum consciousness. Grave practical difficulties. moreover, oppose the acceptance of what truth there may be in the six ideals of method here based upon the cultural ideal of purpose. Our museum buildings now generally employ either top or side light. The prevailing type presents a combination of skylights and blank walls. They are mostly also constructed or planned in hollow Most of them admit of remodelling to give Diagonal Lighting in part or wholly; and the future schemes of many could be changed to give Radial Expansion, to give enveloping gardens instead of enveloped courts; but at what a cost of enthusiastic conviction and of money in both instances! Not in a generation of discussion and experiment could the museum world reach a final opinion on a break with tradition so complete and so costly. The ideal of Restful Inspection condemns the greater part of the show-cases now existing in the greater part of our museums — an equipment costing many hundreds of thousands of dollars, and still good for many years' use. However true it may be that these fixtures are radically inefficient and urgently need to be replaced by forms like those here advocated, the conviction can spread only very slowly against an immense mental inertia and a partiality tenaciously rooted in habit. The ideals of Official Companionship and the Interpretative Catalogue must await a generation with the ability and the freedom to give the one and write the other: hardly the generation now rising, though possibly the next following. We are at present only in our first rude attempts at realizing either ideal, and are learning mostly by our mistakes.

That a museum of art must have exegetes or official interpreters, as Furtwängler 1 predicted years ago, seems selfevident. But they must be critics, not teachers, exponents of culture, not representatives of education; and the class hardly exists among us. Critic means censor only by perversion. In the valuable sense, a critic is one who has begun to understand a work of art and who seeks to lead others to its understanding. In this sense the museum is the home of the critic of tangible art, as the laboratory is the home of the scientist, the library of the scholar, the court of the lawyer, the church of the preacher. Doubtless one day a visitor to every museum of art may count in advance, if he so desire, upon some serious introduction to the spirit of its contents, neither arid nor gushing, either by the spoken or the written word of a critic in its service. Doubtless also this will be a distant day. The ideal of Composite Boards is the museum application of the general principle that any organized effort is most successful when the varied skills it engages are given their representation in the body that ultimately controls it. In other fields this principle is already frequently applied in practice. The granting of votes to women, the admission of employees as stockholders in the corporations they serve, the movement giving the faculties of colleges a share in their management, are unmistakable signs that the future, however far away, belongs to the composite ideal. In the special field of museum administration there have already been instances in which the head of the working staff and others similarly active have been included in the corporation. Gradually doubtless, but doubtless only very gradually, there will be more such instances. Writing about 1830, Stendhal (Henri Beyle) predicted that he would not be read to good purpose until

¹ Ueber Kunstsammlungen aus alter und neuer Zeit. (Munich, 1899.)

about 1880, a prophecy which foretold almost to a year the time of the greatest vogue of his novels and essays. Perhaps 1960 might be named as a possible date when the seven ideals of this book — if they have not meanwhile been forgotten — will have been widely and fairly weighed.

But may not museums of art as we now know them become themselves an obsolete type of institution in this interim? At a time and in a land where the "phonographic church" is seriously proposed, it is impossible to deny that some other way of doing justice to our tangible artistic heritage than its permanent public exhibition may be invented. There are already not wanting the most serious criticisms of the whole conception of the modern museum. The naturalist J. G. Wood writes, "To the general public a museum of whatever nature is most intolerably dull." 1 The lively German writer Julius Langbehn describes a museum of art as a place "where every separate object kills every other and all of them together the visitor." 2 Robert de la Sizeranne inveighs against them as prisons of art, an indictment often echoed.3 A remark of M. Anatole France represents the utmost that can be said in their disparagement: "Since by a universal law life feeds on life, the Sicilian peasant who builds his hut from the débris of a Greek temple is more a philosopher than all the curators of museums." 4 Against these biting verdicts may be set the recent judgment of a literary jury that a poem inspired by a museum object — Keats's "Ode on a Grecian Urn" — is the most perfect in the English tongue. The salvage of

¹ Nineteenth Century (1887), p. 384.

² Rembrandt als Erzieher (Leipzig, 1890), p. 17.

³ "Les Prisons d'Art," Revue des deux Mondes (1899), p. 114 f. The critic T. Thoré had many years before called them "cemeteries of art." Salons de W. Burger. (Paris, 1870.) Salon de 1861, p. 83.

⁴ Le Crime de Sylvestre Bonnard.

this particular vase was well worth the cost of the collection it adorned. For the future we can at least affirm that some form of institution will persist which will continue to bear the testimony which our museums now bear to the truth that beauty is of longer life than utility. The inevitable vicissitudes of things will see to it that myriads of artistic achievements of every tangible kind will cease to hold their place in life and if not lost will need to be conserved in places set apart. William Morris casts up the account for and against museums in a paragraph: "Certainly any of us who may have any natural turn for art must get more help from frequenting them than one can well say. It is true, however, that people need some preliminary instruction before they can get all the good possible to be got from the prodigious treasures possessed by the country in that form; there also one sees things in a piecemeal way; nor can I deny that there is something melancholy about a museum, such a tale of violence, destruction, and carelessness as its treasured scraps tell us." 1 With this summary we curators may be content. Museums are in truth the treasure-houses they are vaunted to be, delicate and difficult as is the task of putting into people's hands the keys to these treasures, and sadly imperfect surrogates as are museum conditions for the vanished worlds in which the treasures once actually lived.

The value of such treasures is as inadequately gauged by the time we spend in looking at them, as the value of poem and story by the time we spend in reading them. The admirer of Michel Angelo or the Venetians finds a new impressiveness in real human presences, the afternoon has new charms for the lover of Claude Lorraine, mythology new delights for the friend of Poussin or Böcklin.

¹ Hopes and Fears for Art, p. 21.

Likewise the nights and days have a new radiance for the student of Dante, the Alps and the ocean new wonders for the intimate of Byron and Swinburne, London and the Thames new fascinations for the familiar of Dickens. Writing of a calm at sea, Bullen in his *Cruise of the Cachalot* describes it as "such a calm as one realizes when one reads sympathetically that magical piece of work 'The Ancient Mariner.'" So largely is the world what the artists make of it for us.



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MUSEUM IDEALS .

PART I. PURPOSE

I. ON THE NATURE AND PLACE OF FINE ART
II. POPULAR EDUCATION IN FINE ART
III. THE AIMS OF MUSEUMS

ON THE NATURE AND PLACE OF FINE ART



MUSEUM IDEALS

I

ON THE NATURE AND PLACE OF FINE ART

I LEARNED to read from a book called "Reading without Tears." A single page remains in my memory. Two children are playing in a nursery. One calls to the other: "Come quickly to the window and see the queen go by!" At the corner of the page appeared a captivating picture of the queen in all her state.

Such a child is every artist. The window is his art. The playmate is his public. The queen is his vision.

FINE ART AND BEAUTY

The root meaning of the word "art" is that of construction, or the purposed combination of things. A passing remark of Aristotle's 'divides the arts of mankind into the arts of our Necessities $(\dot{a}va\gamma\kappa a\hat{i}a)$ and the arts of Pastime $(\delta\iota a\gamma\omega\gamma\eta)$; the distinction being that the arts of our Necessities are followed for their use $(\chi\rho\hat{\eta}\sigma\iota s)$, the arts of Pastime for their own sake. This dichotomy of the arts has been current in Europe since. Our English adjective "fine" applied to art means that the purpose of the artist is fulfilled as soon as his work exists. It satisfies him simply by being. The adjective "useful" means that the purpose of the artist is not fulfilled until his work brings something else to pass. It satisfies him only by doing. Art consists in rearranging our surroundings nearer our desires, and is fine art or useful art according as the rearrangement ful-

fils its aim immediately and by itself, or indirectly and by

proxy.

In Continental languages the arts, called in English "fine" are called the "arts of Beauty" (Belle Arti, Beaux Arts, Schoene Kuenste, etc.). The usage adheres to the only immemorial and authoritative conception of beauty: that of a value inherent in the beautiful thing, to be felt as soon as it exists. According to the Taoist books in China (deriving from Lao-Tse, 600 B.C.) beauty is "the usefulness of the useless." It is a certain merit which things may still possess, although they are of no avail to bring anything else worth while to pass. Although good for nothing, a thing need not be worthless. It may be good in itself; and this is what is called its beauty. The Asiatic conception was reached independently in Africa a millennium later. St. Augustine writes in his "Confessions"¹ of discovering, after long thought, the distinction between the Beautiful and the Fit (Pulchrum et Aptum). The one he defines as that which is complete in itself; the other as that whose value lies in its adjustment to other things. More than a millennium later a similar idea reappears in Europe. To Immanuel Kant beauty was "Purposiveness without purpose." Unclear as this utterance remains in spite of the context and the commentators, the likeness to the Taoist phrase is striking, and its kinship to St. Augustine's conclusion apparent. A thing may be suited to nothing else, and vet may suit us. In this event, although useless, it is beautiful. The production of things having such an internal worth is the object of Aristotle's arts of Pastime, our fine arts; and they are properly called the beautiful arts.

The inquiry may be pushed further. When a thing is good in itself, what is it that makes it so? Of what nature

¹ Book IV, 13.

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is this experience that we have only to become aware of to be satisfied with? What is this intrinsic value that we call beauty? The answer given is that it is joy, or delight, or by whatever other name we choose to call the well-known fact. A beautiful thing is one that is pleasing in itself. Pleasure is the one intrinsically valuable thing known to man. Even virtue and knowledge gain their worth from the happiness they promise. The question — Why should we do right? — is one that can be and often has been put and proven. The question — What good is knowledge apart from the happiness it brings in pursuit or use? — can also be argued. But the questions — Why should we be happy? — What good is pleasure? — are nonsense to every one.

It is possible to misconstrue this doctrine. Yet it contains a fundamental truth as these questions show; and one that needs only to be built upon by an inquiry into the relation of truth and right to pleasure. In advance we may admit that it justifies the definition of the fine arts contributed by the critic Hazlitt in the last century to the Encyclopædia Britannica. The fine arts are those "aiming at the production of pleasure by the immediate impression which they make on the mind." This immediate impression of pleasure we call their beauty. The present century interprets this conclusion in thoroughgoing fashion, affirming that an object is not beautiful unless our pleasure in it is as much a part of it as its color or shape or any other inherent quality. As Mr. Santayana now phrases it, beauty is "objectified pleasure."

While the edition of the Britannica was current in which Hazlitt's Essay appeared, another noted Englishman gave a definition of the fine arts which appears at first sight to contravene it. In his address at St. Andrews in 1865, John Stuart Mill said: "If I were to define art, I should be inclined to call it the endeavor after perfection

in execution. If we meet with even a piece of mechanical work which bears the marks of being done in this spiritwhich is done as if the workman loved it and tried to make it as good as possible, though something less good would have answered the purpose for which it was ostensibly made — we say he has worked like an artist." The essential agreement of this view with Hazlitt's comes to light when we reflect what it is to love an inanimate object. Love in this sense is delight in the presence of the object; it is pleasure derived immediately from it, and coming from nothing to which the object leads, from which it proceeds, or which is in any way other than itself. Any product of human purpose, according to Stuart Mill, which evidences its maker's love for it - his pleasure in the immediate impression which it makes on his mind-is a work of fine art. Here we rejoin the Britannica definition.

The production of even a piece of mechanical work giving this direct pleasure Stuart Mill called "perfection of execution." The phrase is apt; for any creation which satisfies us as well directly by what it is to us, as indirectly by what it does for us, may rightly be called *per-factum*, made through or thoroughly. Chopin's highest praise for music expressed the idea of perfection in negative terms: *Rien ne me choque*. Not that his perceptions were a blank; but that their intense activity awakened no desires — at least marked ones — without satisfying them.

GIFT AND CRAFT

As a matter of fact the human brain, and we may doubtless say, the human hand, is capable, undirected by conscious purpose, of products more nearly perfect, leaving less to be desired, than any won by pains. It is not by art but by nature that men best attain the direct delight that is the aim of fine art. The admission is general. Milton wrote of Shakespeare:

"Whilst to the shame of slow endeavoring art Thy easy numbers flow, . . . "

The prouder source from which they flowed was Shakespeare's quick conceiving nature. Matthew Arnold writes: "Wordsworth's poetry, when he is at his best, is inevitable, as inevitable as Nature itself. It might seem that Nature not only gave him the matter for his poem but wrote his poem for him." Of the jewels five words long that sparkle throughout literature — "Southward many an emerald mile" or Shakespeare's own "John-a-dreams, unpregnant of my cause"—it would seem likewise that many must have presented themselves as they are to the mind of the poet, who only wrote them down, as Coleridge wrote down "Kubla Khan" from a dream. A French critic declares in general terms, "Masterpieces are made without thought, without even intention," - that is, without art.

As a matter of fact also what is born to brain or hand as a thing of joy is apt to be but a germ, an item of promise, whose persistent contemplation invites change for the better. How insignificant the origin in Beethoven's notebooks, of the immortal melody sung at the close of the Ninth Symphony. Its finished form is a triumph of art over nature.

Here appear at once the sphere and the limits of fine art. Its purpose is to finish a promising beginning, to perfect it, to make it thoroughly, to produce from a suggestion of charm a completely satisfactory thing; yet the products of the greatest application may be outdone by the free gifts of inspiration. A suggestion may defy completion.

Two allied sources of mistake obscure to us the supremacy of inspiration. We hear that in fine art matter is indifferent; form alone gives it value. Heine, with characteris-

tic irreverence, and also characteristic sharp-sightedness, makes fun of this principle, naming a certain tailor of his time who "charges the same for a dress coat, whether or not he furnishes the cloth." We hear also that artistic excellence resides in method, not in result of method; in the solution of a problem, irrespective of whether the problem is worth solving or not. Byron wrote, "The poet who executes best is the highest." Each of these opinions may appear to give the palm in fine art to reflection rather than spontaneity. In reality neither does; for the form of a work of art and its method may be as much the fruit of spontaneity as of reflection.

MATTER AND FORM

There remain the questions: What do these utterances of two preëminent minds, and of others before and since really signify; and are they true or false? Does the beauty of a work of fine art in fact reside in its subject or its treatment? Is its immediate charm in fact an affair of the way it is done or the thing that is done?

First, as to the question of matter and form. These two words are used in a sense opposite to their philosophic meaning when we refer them to the subject and treatment of a work of art. In the exact acceptation, the form of any object of sense may be defined as the complex of relations subsisting between its parts; the matter of it consisting in these parts themselves. We grasp its form by the use of the

Again in Schöpfungslieder, 6:

"Den Himmel erschuf ich aus der Erd Und Engel aus Weiberentfaltung, Der Stoff gewinnt erst seinen Werth Durch künstlerische Gestaltung."

¹ Gedanken und Einfülle. Kunstwerk. "In der Kunst ist die Form alles, der Stoff gilt Nichts. Staub berechnet für den Frack, den er ohne Tuch geliefert, denselben Preis, als wenn ihm das Tuch geliefert worden. Er lasse sich nur die Form bezahlen, und den Stoff Schenke er."

² Letter to John Murray on Rev. W. L. Bowles's Strictures on Pope.

intellect, its matter by the use of the senses. When the words are applied specifically to works of art, the reverse is the case. We grasp what is called the matter of a work of art by using our powers of generalization upon it; the form given this matter by using our powers of perception. Its subject consists of abstract ideas which the work embodies; its treatment consists of the concrete embodiment given these ideas.

The philosophic meaning of the words "form" and "matter" may be illustrated by a wave. What is it that travels toward us when a wave approaches the shore? Not the water composing it. Each particle of water simply oscillates up and down, forward and back. Adjacent particles successively assume a certain complex of space relations among themselves; and it is the appearance of this form that approaches. What dashes overwhelmingly upon the rocks is the matter of the wave, its component particles of water, each rising and falling, advancing and retreating.

In applying the same words to a work of art we are misled into thinking of its matter likewise as something solid and concrete, and of its form as something tenuous and abstract. Meanwhile in reality the rôles are exchanged. It is the matter or subject of a work of art that is the tenuous and abstract thing; and the form or treatment that is the solid and concrete thing. This specialized usage confines the matter of a work of fine art to general ideas which we may believe it expressed dimly or clearly to the artist; and regards its form as the embodiment he has given these ideas, considered independently. The proviso limiting matter to those general ideas under whose guidance we may conceive the artist to have worked is a necessary one. Else part of the matter treated in a landscape showing the mouldering roof of a cottage might be the idea of the lamentable fate of those born before the invention of a

certain wood preservative; for this, too, is a general idea which the picture may express to a manufacturer inspecting it. So understanding the terms matter and form, the question — "What proportion of the beauty of a work of art is due to its matter and what to its form?" — is an impossible one. We cannot subtract its matter and leave its form. The two things compared must be the matter on one side and the total work on the other. We must ask — What proportion is there between the beauty which abstract notions may possess and that which may be given their concrete illustration? Not, be it noted, the proportion between the value of an abstract notion and the value of its concrete illustration. By the beauty of a general idea we do not mean its usefulness, the indirect worth it may possess through the grasp it gives us of the world, but the pleasure its simple contemplation affords. To the question as thus stated the answer cannot be doubtful. Heine is right. Speaking broadly, the internal fascination of the matter of a work of fine art considered separately is a negligible affair compared with the charm which may inhere in the total work as formed matter. To use the familiar word, the "story" of a work of art, made up out of the general ideas it embodies, contributes only minimally to the beauty it may possess.

In proof of this conclusion let us take two actual instances in which the matter of a poem has been outlined for us, in the one case by the poet, in the other by an accurate if antipathetic observer. Poe thus describes in detail the story of his poem "The Raven"; without being able to avoid making his description itself a kindred work of art in prose. "A raven, having learned by rote the single word 'Nevermore,' and having escaped from its owner, is driven at midnight, through the violence of a storm, to seek admission at a window from which a light still gleams

- the chamber window of a student, occupied half in poring over a volume, half in dreaming of a beloved mistress deceased. The casement being thrown open at the fluttering of the bird's wings, the bird itself perches on the most convenient seat out of the immediate reach of the student, who, amused by the incident and the oddity of the visitor's demeanor, demands of it, in jest and without looking for a reply, its name. The Raven addressed answers with its customary word 'Nevermore' — a word which finds immediate echo in the melancholy heart of the student, who, giving utterance aloud to certain thoughts suggested by the occasion, is again startled by the fowl's repetition of 'Nevermore.' The student now guesses the state of the case, but is impelled, as I have before explained, by the human thirst for self-torture, and in part by superstition, to propound such queries to the bird as will bring him, the lover, the most of the luxury of sorrow through the anticipated answer 'Nevermore.' . . . The reader begins now to regard the Raven as emblematical—but it is not until the very last line of the very last stanza that the intention of making him emblematical of Mournful and neverending Remembrance is permitted distinctly to be seen."

The other instance is the following succinct account of the story of Tennyson's "Enoch Arden," which is said to have been given by the English economist Walter Bagehot. "A sailor who sells fish breaks his leg, gets dismal, gives up selling fish, goes to sea, is wrecked on a desert island, stays there some years, on his return finds his wife married to another, speaks to a landlady on the subject, and dies."

As to the other member of the comparison, what shall we say is the work of art itself? The impressions received in contemplating it may be very different things with different people. Which can be called the work?

What the poet Edwin Markham found in Millet's picture of the "Man with the Hoe" he has eloquently set forth in the poem bearing that title:

"Bowed by the weight of centuries he leans Upon his hoe and gazes on the ground, The emptiness of ages in his face, And on his back the burden of the world.

"Slave of the wheel of labor, what to him
Are Plato and the swing of Pleiades?
What the long reaches of the peaks of song,
The rift of dawn, the reddening of the rose?

"How will it be with kingdoms and with kings — With those who shaped him to the thing he is — When this dumb Terror shall reply to God, After the silence of the centuries?"

But let us hear Millet himself. His ruling purpose, he tells us, was to paint man and his surroundings as a unit; and this purpose is now spoken of as his especial originality, his contribution to the art of landscape. "When you paint a picture," he said, "be it a house, a wood, a plain, the sea, the sky, think always of the presence of man, of his affinities of joy or pain with such a spectacle; then an inward voice will speak to you of his family, his occupations, his anxieties, his predilections; the idea will bring within that orbit all humanity; in creating a landscape you will think of man, in creating a man you will think of the landscape." Of the "Man with the Hoe," he wrote to a friend: "The on dit about my 'Man with the Hoe' always seem to me most strange, and I am obliged to you for telling me of them, for they give me a new opportunity to wonder at the ideas that are attributed to me. In what Union did my critics ever find me? Socialist! Truly I could answer them in the words of that Auvergnat commissioner who replied to a criticism from his fellow-townsmen: 'They say at home that I am a Saint-Simonian;

't is n't true, I don't even know what that means,' Can't people simply conceive the ideas which may come into one's mind at the sight of a man who is destined to gain his living by the sweat of his brow? There are even people who say that I deny the charm of the country. I find far more than charms. I find infinite splendors. I see as well as they do the little flowers of which Christ said: 'Even Solomon in all his glory was not arrayed like one of these.' I see clearly the haloes of the dandelions, and the sun which unfolds yonder, over the landscape and beyond, his glory in the clouds. I see no less, in the smoking plain, horses at work; then in a stony spot a man tired out, whose ejaculation 'han' has been heard since morning, and who tries to straighten up and get his breath. The drama is wrapped in splendors. My critics are educated people of taste, I fancy; but I cannot put myself in their skin, and as I have never in all my life seen anything but the fields, I try to say as I can what I have seen and experienced while I worked there."

Far less success than Millet met in trying to say on canvas what he had seen and experienced might attend other artists with other beholders. Imagine the Abbé Prévost's novel of "Manon Lescaut" perused by Goethe's student in "Faust," in whose opinion

"The hand that Saturdays wields the broom Will best caress thee Sundays."

Or by the English squire of the popular play, who wooed because "The Hall needs a mistress, and its hearth-stones baby feet"; or by Rodolphe in Murger's "Vie de Bohême" with his learned certainty that "l'instrument était d'accord"; or by Dante, whom the maiden he had met but twice or thrice on earth must warn him, even in heaven, "Not only in my eyes is Paradise." To the Bursch the novel would suggest blows — "Pruegel"; to the squire,

divorce. To Rodolphe it would give back his whole youth; to Dante also bits of heaven, all spotted by the world. What must his Crucifixion in San Marco have been to Fra Angelico as he painted it; and what would it have been to Geronimo and his band of Apaches, who heard the story after their capture only to grunt their regret that this particular method of death by torture had never occurred to them in any of their raids? These are differences of comprehension based on mental and moral endowment and experience. There are also differences of physical capacity: muscular and tactile idiosyncrasies; individualities of visual or auditory perception — varieties of type or range of sensations of sight, varieties of force, discrimination and retentiveness of sensations of noise or tone.

These are the differences and the possibilities of difference between individual impressions from one and the same work of art. What then is the work? Evidently it is the thing the artist wrought; and this thing is the total impression from the work which satisfied him to leave it as it is, to believe it thoroughly made — per-factum — as far as possible to him. To find the work made we must go back to the maker. Instead of assuming him to be in our skin — to use Millet's phrase — we must put ourselves in his skin. We must resurrect, as far as we may, the sensations, images, thoughts and feelings which his finished creation embodied to him. We must conceive the work as it unrolled itself in his mind, when, at its completion, he could review it in every part, in the revel (Schmaus) which Mozart said the final review of his compositions brought him. It is this experience that we must engender again in our own spirit if we would know the work of art as it is. In the words of Pope:

> "A perfect judge will read each work of wit In the same spirit that its author writ."

¹ Essay on Criticism, Part II.

Anything short of this reconstitution of the artist's own perception of his work is ignorance of it more or less profound; for it is ignorance of that which brought it into being, of that for which it exists at all.

It is true that by no means every workman intending that the fruit of his toil shall offer the world materials for such a revel obtains his wish. We sometimes speak of the artist as of a supernal being differing in kind and not simply in degree from other men. An artist's work may even in part be his despair; as when Rostand exclaims: "What matters it though rhyme and metre yield to us, if the dream we would put into them no longer lives!" He may mistrust both it and himself; as when Zola asks: "Surely, there is some good in what I have done"; or Kipling: "Heart of my heart, have I done well?" His enthusiasm may be a fire of straw that in the end would have burned itself out where it was kindled; as we may believe of many of the

> "... epics ... wrecked by time Since Herrick launched his cockle-shells of rhyme."

He may live to condemn his work himself, as we may fancy that emulator of Michel Angelo did who perished of chagrin under the ridicule heaped upon his Moses of the Fontana dei Termini. Or, however inextinguishable in himself, he may find the fire of his fancy incommunicable to others, as Bizet found the beauties of his "Carmen" incommunicable to the Paris of his day. But unless the fire is there, the revel ready, he is no artist at all, as Arnold reminded his fellow-craftsmen in uncouth lines that seem humorously intended as an instance of what they condemn:

> "What poets feel not, when they make, A pleasure in creating, The world in its turn will not take Pleasure in contemplating."

¹ E. Rostand, Le Vers et l'Idée.

Nevertheless, it is in the artist's own soul, great or small, that alone we can find his work. In spite of all the uncertainties and difficulties of the task, we must try to live over again — as far as we may, and it may not be very far — his experience as its re-reader, re-auditor, re-spectator. To know it we must go back to him.

According to Schopenhauer, the artistic object is in itself what he calls a Platonic Idea, although he is ready to admit that Plato might have questioned the appropriateness of the name. It is a something neither abstract nor concrete, but both at once — what may be called a universal particular. This sounds like one of those distressing things, not unknown in philosophy, which are what they are not. But if we may interpret the phrase by our own lights the laws of thought still stand in spite of it. The work of art is not the sum of abstractions the artist sought to embody in it; nor yet the particular thing which any and every one may find it to be; but only that particular thing which the artist recognizes as his message to whom it may concern. He may have caught the ultramarine of a brimming brook against the new green of springing grass under an April sky, and forced the tones of the combination. subordinating or omitting other details that were unnecessary to its verisimilitude or distracting from the beauty that had struck his fancy. This is to see things through a mood, or a temperament, or an endowment; as a portrait does and a photograph does not. The real picture does not lie on the canvas open to every eye, but in the mind of the artist and his twin-brother, the beholder whose eyes are portals to a like mind. In this sense we may agree that a work of art is a universal particular: an Idea, in at least a new Platonic acceptation.

The two members of the comparison — the matter and the work — are now clear. On the one hand, the matter, consisting of certain general ideas which the work expresses to the artist; on the other, this subject formed into the concrete object experienced by him as the work. In comparing the two in the specimen instances of "The Raven" and "Enoch Arden," our business is to estimate the internal charm of the subjects of these poems as stated to us, in relation to the charm of the objects which we know as the poems. To this end we must try at first to divest ourselves of our knowledge of the poems, lest fragments of their form should mingle for us with their matter in recurrent

memories. We must further try to neglect the opposite tempers in which the two stories are narrated, one insensibly harmonizing with the mood of the poem, the other purposely diverting us from it. We must then compare the two series of abstractions with the poems as we re-read them. Thus carrying out the two comparisons, it appears, as it would in any other cases, that the beauty of the matter of a work of art is a vanishing quantity compared with the beauty that the work itself may possess. Poe's summary of "The Raven" has little, indeed, of the compelling power of the poem even to us of another century. Who that has heard "Enoch Arden" read as it may be will remember the cry, "A sail! A sail!" with anything but a thrill, or Bagehot's epitome with anything but impatience. The subjects of the two poems seem simple threads through them, the verses themselves two superbly woven textures — of apt and graceful expression, of imagery, of pathos, of insight, of rhythm, of harmony and melody of sound — that the threads serve only to bind together. Speaking generally, no exposition in abstract terms of the content of any work of man's hand that the maker loved and made for us to love, possesses an immediate pleasurableness, a beauty, even remotely approximating the particular delight of which it was born and which it aims to

perpetuate. To seek formulas in which its kernel of native charm shall be imprisoned, its inherently valuable essence drawn off for us, is to grasp at shadows for substance, and to leave ourselves poor when we might be rich. In Gérôme's atelier, before the picture called *Les Deux Majestés* showing a lion crouching in the desert and gazing at the rising sun, a visitor is said once to have remarked: "C'est bien, ça; mais qu'est-ce que cela prouve?" "Cela prouve," replied Gérôme, "que vous êtes idiot." 1

The question implicit in the remark of Heine has proved impossible to answer as he suggested it. Does the beauty of a work of art reside in its matter or its form? Of the second member of this alternative we have no independent experience. We can isolate more or less of the subject of a work of art in a series of statements, but the process of abstraction leaves no residue that we can separately identify as the treatment. For this we have been constrained to substitute the work of art itself, and have found that beauty of matter, inherent charm of a group of abstractions, is as nothing compared with the immediate pleasurableness, the beauty, that we may discover when we try to reproduce in ourselves the total of impressions, sensory, imaginative, and emotional, in which we are led to think the work consisted to the workman. Heine's remark, although an inexact statement, involves a truth.

PROCESS AND PRODUCT

The question implicit in Byron's remark, although a possible one, proves also unanswerable. Does the beauty of a

¹ The same conclusion may be indirectly reached by a strict deduction from indubitable premises. While we cannot isolate the form of a work of art, we can compare two embodiments of the same motive: for example the Joan of Arc of Dubois and the Joan of Arc of Frémiet. The differences between them belong to the factor of form. Now these differences are literally infinite. But in calling the subject of the two the same we define it as a finite group of abstractions. Whence it follows mathematically that matter in a work of art vanishes in comparison with form.

work of art reside in method or result of method? The question is unanswerable because it shuts us up to one or other alternative. "The poet that executes best is the highest" suggests that artistic excellence inheres in the way a thing is done. What is done does not count. The truth is that either or both may count. Byron's remark — thus interpreted and perhaps unjustly — although an exact statement, involves an untruth. The thing its maker loved, and made for us to love, may be either a process of accomplishment, or the product accomplished, or both at once. What he took his delight in may either be solely his use of means to an end, or solely the end he reached, irrespective of how he came there; or he may glory in dexterity and achievement at once.

All our sports, including games of skill, are, in their measure and way, fine arts of the process. They consist in bodies of rules for reaching certain goals in rivalry; and the true spirit of sport consists in an enjoyment of strife toward the goal under the rules. The goal may be, and often is, wholly indifferent. Victory, the attainment of it, is a touchstone of the excellence of the striving, and its anticipation is one source of our delight in the striving; but the sport is over when it ensues, and its joys — the bag, the decision, the record, the prize — are an addendum to the sporting fervor. The real sportsman — the true lover of hunting, fishing, yachting, rowing, football, tennis, golf, billiards, cards, chess — is an artist of the process. He is even satisfied to lose, if he has played his game well that is, in a way that in the long run would bring victory — for his joy is gaudium certaminis.

Gaudium certaminis in real life may develop the artistic spirit. Admiral Dewey, just after his "conquest of an empire without the loss of a man," is said to have remarked, "I hope it will be thought a workman-like job," having in mind, not the empire, but the conquest. The railroad organizer Harriman is reported to have remarked of his success, "There is more in the game for me than what has been said; there is the satisfaction of doing a thing right" — in his turn thinking, not of the systems consolidated, with the wealth and power they brought him, but of the ingenious, daring and patient combinations by which he effected his purposes, other men notwithstanding. These were a work of art; there was beauty in them.

The joy of non-competitive struggle, mental or bodily gaudium certaminis without an animate opponent — may make of it a work of art. A mathematical proof brings to light two chief sources of our delight in the use of means. We may take pleasure either in their economy or their aptness. Economy of means gives us a sense of power, their aptness a sense of good fortune; both pleasant things, capable of making the process that illustrates them warm our hearts as we review it. A geometrical demonstration may be elegant both because so simple and because we wonder at the discovery of the tiny but inevitable gateway to the new certainty. The certainty itself — for instance, that the angle reached by the proof is the tenth part of a circle - may be wholly indifferent. The method, not the result, is here a work of fine art. Feats of strength, agility, leger-de-main, may become works of fine art, uninteresting as the deeds accomplished — the thrown weight, the cleared bar, the bits of paper held in the air by a fan may be in themselves. What the singer admires, and wants us to admire in his roulades, the violinist in his cadenzas, is not the musical phrases — these may be empty and tedious enough — but the deft play of the vocal organs, the miraculous bowing and fingering.

Yet incomparably the more important type of fine art

¹ At a dinner of the Economic Club in New York, November 30, 1908.

is that in which the work is product also, and not solely, if at all, process; an end achieved, whether or not the means toward the end as well. The product may be an occurrence — as in literature, music, acting, the dance — or a tangible object — as in painting, sculpture, their minor derivatives and architecture. In either case the process remains unperceived by the beholder, although the product may in one or another point betray it, and by intention of the artist. His art is then one of both process and product. The gossamer make of a Chinese ink-painting may propose to the beholder's admiration the wonderful surety of the maker's hand; the endless refinements of a Greek carving his acuteness of eye, his delicacy of hand, the subtlety and reach of his imagination.

But for the beholder of productive art there remains between process and product the gulf that separates perception from inference. He does not see, he only fancies, the artist at work. There remains for him also the bar that any ignorance of the artist's craft may interpose. There remains for him also the immense disproportion between the range of impressions concerned in process and product: on the one side the events of a workshop, on the other the macrocosm about the maker, the whole of life outside his technical task, any part of which the microcosm forming the work may set before its beholder. Finally, the choicest elements of his work, those due to inspiration, contain no intimation of the process of their birth, for there was no process. They did not become at all, they simply were, to him as they are to us. These are conclusions very damaging to the element of process in productive art. The beholder means the future. The value he cannot descry is not the worth whereby l'uom s'eterna — the maker immortalizes himself. For the beholder the beauties of genesis are too impossibly recondite, too absurdly scanty, com24

pared with the open and illimitable charm which a product may possess independently of all its hints of how it came to be. Technical qualities — if by this phrase we mean features that betray the secrets of a craft — are nothing: the work of art apart from them is everything. They doubtless made up the chief beauty of a coat by Heine's tailor, for we may believe it offered little to the non-sartorial eye; likewise the brushwork of a painter, that makes its effect as if by enchantment, may be our wonder and his pride. But when all is said, we can still call these beauties nothing. Our admiration of skill has its close limits; our admiration of its results none.

But let us be on our guard against the deceitfulness of words. The phrase "technical qualities" has plainly another meaning, and one of importance for beauty. Technical quality in a sestina may mean, it is true, the dexterous process which we infer laid out six stanzas and a final triplet with the same six terminal words in varied combinations, and fitted to them comprehensible and charming lines. The idea of this process counts truly for little in its beauty. But technical quality may also mean a fact of observation: the fact, for instance, that all the six stanzas and the final triplet of a poem ring changes on the same six words; and this is a most enjoyable characteristic of the product. The phrase technical quality can rightly be applied to such a feature for the reason that only a writer long exercised in metrical composition can compass it. Technical qualities in this sense are difficult beauties. They are the perfections of execution in a work of art, its far-fetched and dear-bought excellences. Doubtless it is this sense that we must read into Byron's dictum. If so, no knowledge of the artist's craft is needed to perceive the perfection of execution he praised: only eyes and their patient use.

It is true that a knowledge of the possibilities of failure in such attempts may greatly sharpen our eyes and develop our patience in the apprehension of their success. The case may be compared to that of translation. The process of finding the nearest equivalent in one language for an expression in another may reveal to us its meaning much more quickly than the process of acquiring it as a part of a mother tongue. Nevertheless the mental standpoint of the translator is one of only demi-culture. Until he can forget the vernacular quasi-equivalent, until he can return wholly to the atmosphere of the phrase to be translated, as if it were his mother tongue, he has but half comprehended it. So with the apprehension of a piece of productive art. Unless we can forget the thoughts of method which have sharpened our eyes and developed our patience to apprehend its results, and live alone in these results, we have missed the full impression that the artist offers us. The mental standpoint of the beholder who must find in knowledge of technique the key to a grasp of technical qualities, of the hard-won excellences in the work beheld, is also one of demi-culture. Yet let us not deny to the demi-culture of translation its rights to respect. Better a thousand times only to touch the hem of ancient saintly garments than to ignore the Vedas and the Prophets altogether; and only to look into faces transfigured by beautiful visions than to know nothing at all of Sophocles, or Virgil or Tolstoi. So the aid of a knowledge of craftsmanship is not to be despised, if it but supply, and not intensify, the lack of intuitive recognition.

However perceived, the apprehension of technical qualities in this sense does not shut us up in the atelier, but opens to us the world without. But while they may be choice parts of the finished work, they may not be its choicest part. The fruits of inspiration are still the despair of technique, still "the shame of slow-endeavoring art." These have no paternity on earth. They are nameless offspring of an immaculate conception, as all the greatest blessings of mankind are held to be.

The answer to the question implicit in Byron's dictum proves more complex than the conclusion as to matter and form. It appears that there are two types of fine art: one in which the work of art — the thing "done as if the maker loved it," to use Mill's phrase—is the means he uses toward an end; the other in which it is also, if not exclusively, the end he reached. There are also two senses which may be given the phrase "technical quality." In the fine arts of process, technical qualities in the first sense of features telling of productive activity, are everything, the result achieved nothing. In the arts of product, — the fine arts par excellence — they are nothing, the result everything. But the phrase may also mean features of a result: those, namely, which it requires much practice in an art to achieve, though none to apprehend; and in this second sense the productive arts owe technical qualities much, albeit not the best, of their beauty.

A woeful error — apparently not uncurrent — jumbles the dicta of Heine and Byron. The blunder may be stated in the following inference: In fine art, matter is nothing, form everything; therefore what an artist takes for his theme is indifferent, the whole of art lies in his way of treating it. That this conclusion is an extravagance appears when we reflect that in the general judgment a half-length would never be so good a portrait if taken from the waist down, as it might be if taken from the waist up; nor a picture of an ulcer — to keep to a bearable instance — ever so commanding a work of art as a landscape might be. The painter Raffaelli even affirms that there never was a well-painted battle piece. The conclusion rejected, what

is wrong with the inference? The fallacy is plausible. If matter is zero in art, what difference can it make from what zero an artist starts? The reply is that to call matter nothing in comparison with the work that sets it forth is not to deny the endless differences of such nothings. The abstract notions that make them up are like the differentials of mathematics, all infinitesimal, yet varying indefinitely when integrated. The fallacy is plausible; yet so egregious as to be well-nigh impossible of statement in terms which shall not be laughable. Are there then no differences of enjoyableness in objects illustrating different general ideas: a tree and a pencil, for instance, a disaster and a dance? Thus reduced to clarity, the muddled persuasion that motive is indifferent in fine art, treatment all-powerful, proves only ridiculous.

These two tendencies of opinion regarding the fine arts par excellence — that which seeks their beauty in matter. instead of formed matter, and that which seeks it in process, instead of finished product—are both vagaries, indicative the one of the lay attitude of mind, the other of the professional. They are Idols of the Cave, to use Lord Bacon's metaphor: illusions born of the different spheres within which men's lives are passed. For most of us our whole existences are a training in an instantaneous passage from appearances to what they signify, from things to the stories they relate. The habit is out of place when the things are works of art. It misleads us in our search for the especial good that the thing was made to bring us. Nevertheless the familiar tendency reasserts itself here also, and we ask: "What does this thing show?" "Whither does it lead?" As if love led out of itself. Of the lovers in "Les Misérables" Victor Hugo writes: "Marius and Cosette did not ask whither this was going to lead them. They looked upon themselves as already arrived. It is a curious idea of peo-

ple to think that love leads anywhere." 1 Again, for the few who are artists life passes in a perpetual struggle with means of expression. If teachers of others, as most artists are at one time or another, they are perpetually criticising the procedure of their art, and inculcating its rules. Procedure and its rules come therefore to dominate their thoughts, as they do the thoughts of professional philosophers. The process of argument, in the words of William James, "is usually a thing of much more pith and moment than any particular beliefs" it reaches. On all mankind the spirit of custom is "heavy as frost and deep almost as life." What wonder then that the layman, confronted by an appearance whose native value inheres inextricably in its whole self as embodied abstraction, should evaluate it not by what there is in it, but by what he can separate out of it. What wonder that to a professional the work of art tends to mean chiefly the toil it cost, and takes its value chiefly from its success rather than from its claims to succeed. Meanwhile the body of impressions which make up the work itself—the reality which the story outlines, the aim which the technique serves — is slighted. To almost every one the phrase "study of art" means talk about it, or practice in it: to almost no one the occupation of contemplating it. Of the time and effort we devote to this ubiquitous study what proportion is taken up by actually listening to songs and symphonies, actually reading poems, actually inspecting pictures and statues? Let the ignorance out of which public and professional alike speak and write upon them declare how little. The public attends to the story of a work, the professional to its make, and neither to the story as made. So Cinderella sat by the fire unnoticed, while her two sisters went to the ball and won the admiration. Yet she was the real queen and in the end received the crown.

¹ Les Misérables, IVme partie, livre 8me, chapitre 2.

ART FOR ART'S SAKE

That this often repeated phrase may not be misunderstood, let us recall at the outset the definition of it given by a protagonist, Théophile Gautier. "Art for art's sake signifies for adepts, a labor freed from every care save that of beauty in itself."

A work of fine art is a creation of man which is beautiful in its totality, whether as process or product, the work beautiful as product being incomparably the more important type.

But nothing, however satisfactory in itself, can be rightly valued unless seen also in its relation to the rest of life; and men have always sought thus to weigh the fine arts. Aristotle writes of tragedy: "By pity and terror it effects the purification of such feelings." Is he not describing rather our reaction upon drama, than drama itself; its use to us rather than its beauty for us? The books tell us that Aristotle never made himself clear upon this point. In one of his sonnets Michel Angelo condemns an undivided allegiance to beauty in reflecting upon his own past:

"... the passionate fantasy
That made of art my idol and my king,
How error-laden, now I know full well."²

In his little prose poem "Beauté Rustique," M. Anatole France writes of the threshing floor seen from his window: "Dropping my books, pen and paper, I look with envy upon these threshers of wheat, these simple artisans of man's foremost labor. How humble and little I feel beside them! What they do is necessary. And we, frivolous jug-

¹ Quoted in Larousse's Encyclopædia, article "Art."

² Sonnet CXLVII.

[&]quot;Onde l'affectuosa fantasia Che l'arte mi fece idol e monarca, Conosco or ben, com'era d'error carca."

glers, vain players on the flute, can we flatter ourselves that we accomplish anything, I will not say useful, but even innocent?... The laborers I see from my window will thrash to-day three hundred sheaves of wheat; then they will go to bed tired and satisfied, without a doubt as to the value of their work.... But I, shall I know to-night, when my pages are written, whether I have well filled my day and merited my sleep? Shall I know whether I have carried good wheat into my granary? Shall I know whether my words are the bread that supports life?"

Here the artist of Pastime looks beyond his art, and asks its place in the world of our Necessities. In so doing he emerges from the Contemplative into the Active life; from the life personified for mediæval Europe by Rachel in the Old Testament, and Mary in the New, to that personified by Leah in the Old Testament and Martha in the New. The Contemplative life so-called by our forefathers is an existence devoted simply to becoming aware of things; the Active life one which turns them to purposes beyond themselves. The arts of Pastime have their end in the life of Contemplation. Their world consists of things of which we only need to become aware to know their right to be. The arts of our Necessities end in the life of Action. Their world consists of things first proving their right to be when turned to purposes beyond themselves.

Anything that is has its relation to our purposes direct or indirect. Though in the arts of Pastime, the fine arts, we aim to do nothing with the things created, they will inevitably do something with us; and we have the right to demand that this something shall at least be nothing bad — preferably it should be something good. They must not be harmful; they must at least be innocent, as M. France implies — better helpful. It is evident that a work of fine art — one created to give pleasure by the immediate im-

pression it makes on the mind — may have its share of harmful effect — for example, the "Danse du Ventre"; may be innocent — for example, an arabesque; or helpful — for example, "the height, the space, the gloom, the glory" of Milan Cathedral. Practically the two worlds of the Contemplative life and the Active life cannot be kept apart. A work of fine art, though made to bring us the good that comes from simply looking at it, cannot fail to influence us beside and mostly for weal or woe. Assuredly we must see that it shall not do away by its effects with the good it brings us as a spectacle. Yet the artist is concerned only with the spectacle: and with its effects only as these enhance it.

A thing of beauty ought also to be a thing of use. Admitted. The proposition may also be reversed. A thing of use ought also to be a thing of beauty. The demand of practical men upon artists has its legitimate counterpart in a demand of artists upon practical men. A product of useful art should not in its turn do away as a spectacle with the good it brings us by its effects. Practical men may indeed say that we can get on without beautiful things, but not without useful things; clumsy make would be a fatal lack in a surgical instrument; awkward appearance practically none. Artists may retort that it is not worth while to get on at all unless we reach in the end what beautiful things bring us at once. The part of Mary in the world is a good one, and cannot be taken away. She has already what Martha is still working for. Another day may never come, but now is here.

The complete ideal for all the arts, both fine and useful, was clearly set forth to the passing generation of English-speaking people by William Morris in the words, "A joy to the maker and the user." The motto, "Art for art's sake," is frivolous. A motto, "Use for the sake of use,"

would be imbecile. The cicada of La Fontaine's fable, that lays by nothing for winter, may be a trifler. An ant that should lay by and never intend to take out for winter would be a fool. Anything with which we have to do should at once yield and promise joy. If it yield joy and promise pain, like a deadly flower, it is but partially perfect, fitted to the world as Idea but not to the world as Will, to use Schopenhauer's division of the universe. If it yield pain and promise joy, like medicine, it is partially perfect in the opposite sense, fitted to the Active but not the Contemplative life. It is wholly perfect, fitted at once to Idea and Will, to the Contemplative as to the Active life, only if it both yield joy and promise joy, like the rainbow.

In fine art, as in all other things, this is the limiting case of excellence. A creation of fancy ought both to be good and to do good. The greatest poetry, Matthew Arnold told us, is "the noble and profound application of ideas to life" "under the conditions fixed by the laws of poetic beauty and poetic truth." Of these two criteria the first stipulates that it shall do good, the second that it shall at once be good and do good. Taken together they predicate a union of Right, Truth and Beauty, the three ancient categories of value, into a Summum Bonum. All three are forms of joy: Beauty joy felt, Truth joy anticipated, Right joy shared.

The three have been identified. We are told that "Beauty is Truth, Truth Beauty." What does this mean? Let us translate the terms into accepted equivalents: the immemorial definition of beauty, now luminously put in Mr. Santayana's two words "objectified pleasure"; and the simplest definition of truth "the correspondence of idea with reality." Are we then to understand that the correspondence of idea with reality is objectified pleasure; and vice versa? Truly, this is not visible

at once. Literal Keats's exclamation cannot be. What interpretation can we reasonably put upon it?

Take again the dictum that beauty and virtue are one. As Lotze expounds it, beauty is right incarnate, and right is beauty invisible. This we can begin to comprehend. One and the same general system of relations between individual things, when perceived objectively, is the basis of all our pleasure; when analyzed subjectively, proves to be our moral ideal. For our present untechnical purpose we may seek to express Lotze's view — in itself a work of fine art — in simpler words, and with it that of Keats, without perhaps departing widely from either.

Beauty is truth; because that which harmonizes with our experience, conscious or unconscious, is a pleasure; and it is harmony with experience in advance of it that we call truth. Truth is joy anticipated. Hence the demand for the return to nature in fine art. Hence the superiority of imaginative work done "with the eye on the object" to adopt Wordsworth's phrase.

Truth is joy anticipated. Let not this conclusion be mistaken for the absurdity that all truth is pleasant; that no truth can be painful. What it affirms is that truth $qu\hat{a}$ truth is a pleasant thing. When the reality occurs of which the truth is the idea, its encounter with a mind prepared for it is productive of pleasure, however this pleasure of satisfied expectation may be swallowed up in the painfulness of the reality experienced. To use Fechner's phrase, the possession of truth is "in the direction" of pleasure.

Beauty is virtue; because it is the accomplishment of desire that is pleasure; and it is action in accomplishment of the desires of all concerned in our act, felt and weighed against one another as our own, that is virtue. Right is joy shared. Hence the demand that a great work of the imagination should not alone be profound—express truth—

but be noble as well—express virtue—is a demand in the interest of its beauty; for thereby it acquires the suggestion of "joy in widest commonalty spread" to quote Wordsworth again; that is, joy indefinitely augmented. It is because the Golden Rule with its phrase "Whatsoever ye would" commands the furtherance of desire determined as the resultant desire of all concerned, that its yoke is easy and its burden light. A sure instinct impels us to speak of "the music of the Gospel" and to say, "Our highest Orpheus walked in Judea nineteen hundred years ago."

But beauty is joy felt, immediately and individually. The labor of fancy starts in a flush of private pleasure in something seen or thought, and advances as the glow appears in new matter. How should the mind be able to add new beauty to beauty given? A fascinating melodic or harmonic phrase drops into the musician's fancy, perhaps after a long interval of silence. Why should there not, on the doctrine of chances, a similar interval elapse before another presented itself? Why should a joy as it were infect. the mind with joy? Why should a pleasure received from without enable a man to build up out of his own head an elaborate creation affording added pleasure to himself and others? The process is an unexplained riddle of mental science, but a fact nevertheless. We do not know How, we only know That. A friend of Gray's waited in the poet's chambers at Pembroke Hall, Cambridge, when Gray hurried up the stairs, dashed into the room, and rushed to his writing table, murmuring:

> "Ruin seize thee, ruthless king! Confusion on thy banners wait!"

The ode he had long meditated had given him its opening lines, and he exulted that the spark had caught which would insure its progress in a steady blaze.

"Chacun a son goût." The blaze starts and spreads in very various material in various minds. Different men take their pleasure in ways often most strange to one another. The field of experience, real and fancied, in which a man finds and can make his pleasure, determines the range of his artistic imagination, constitutes his especial message as an artist. Greek art sprang out of an enthusiasm for the human body; Gothic art out of the stimulus of an angle. Far Eastern painters and sculptors draw endless motives from the life of animals — their habits and their habitat; Western artists are chiefly interested in their death — the mortal combat, the chase, the quarry. Religious truth awakened Bunyan's fancy; the cynical and the sexual allured Maupassant. Shakespeare seems habitually to have written with a mind so heavy with thought and quick with passion that he could not stop to utter it unless in the fewest and most pungent words. A like rapid and pregnant use of language is a trait of Kipling. George Sand's style resembles an untroubled current, running strong and full. These differences are a demonstration of the inexhaustible fertility of art. The worlds waiting to be born of the trowel, the chisel, the brush or the pen are as indefinitely numerous and various as the endowments of nature and circumstance possible to man.

A certain whimsical member of the Corporation of Harvard University was accustomed, when a case of discipline came before the board, to move its reference to the Committee on Fine Arts, explaining that he had always noted an intimate relation between the fine arts and immorality. What is immorality? It is life at the expense of others. The praise of such a life under the phrase "the will to power," Nietzsche called a standpoint "Beyond Good and Evil" — "Jenseits des Guten und Boesen" — recognizing the "transvaluation of all values" with which

he saw white what the civilized world had hitherto seen black. To the rest of us a giant's strength is valueless if we use it like a giant; but even a pigmy's strength invaluable if used for others as one's self. Is it true that to the mind wrapped up in works of fancy, as they have hitherto been variously given the world, others' woe is but a dream—"mal d'autrui n'est que songe"? Certain facts point that way. Had the Greeks of antiquity not had better morals than their gods the race would not have lasted long enough to invent them. To-day, if French morals were not better than those of their novels and plays, the nation would have been incapable of the "union sacrée" in defence of France to which all the world has of late paid homage.

Three truths — one relating to the work of art, one to the artist and one to the beholder — help to explain the persistent drift of fine art toward immorality, whimsical indeed as the linking of the two may appear to us in the end.

The whole of nature is a theatre of injustice. Leopardi wrote:

"Nature, I know, hears not, And knows not how to pity."¹

The ultimate material of fancy is a creation groaning and travailing together; and if fine art mirror nature, it must reflect the travail and the groans.

Moreover, the "artistic temperament" is especially prone at once to error and to sin, through its very susceptibility to be led captive by the moment's pleasure. The worlds of fancy are so terribly beguiling — above all the ideal world par excellence, whose inhabitants are melodies and harmonies — that they who spend much time among them are often sick at heart when they come back to the real one.

"So che Natura è sorda Che miserar non sa."

G. Leopardi: "Il Risorgimento."

The endowment that can seize and hold beauty — its own present joy — even though it consent to labor after truth — the joy-to-be of confirmation from without — must still rise above itself for right — the joy that neither is nor is to be its proper own.

Finally, there is a mental law by which our sensibility to beauty is enhanced by pain, either fancied, or within limits, actual. From "deviled" meats and musical discords to the sorrows of tragedy, pain adds a spice to accompanying pleasure whose charm certain natures cannot forego. In the particular instance of the charm of fancied pain we cannot believe that any sentient being feels joy actually in others' suffering. Our idea of the pain that we see or fancy others feel, however faint a copy it may be of its original, is a pain all the same. The only joy is in the stimulus which pain attributed to others lends to our own vital processes. But the existence of words and phrases signifying malignant joy, suggests that some men have confusedly coupled their own joy directly with others' pain. Some men have also thought that a state of perfect happiness would be a state of utter boredom and hence far from happy. Yet to deny the possibility of perfect happiness on the ground of its tedium is an incredible ineptitude, based on the commonest of logical blunders, that of petitio principii, or the assumption of the point to be proved. The argument runs — Bliss without alloy would be tedious; but tedium is unhappiness, therefore perfect happiness would be unhappy, which is unimaginable. The major premise here asserts that perfect happiness is imperfect, in a word contradicts itself; this assertion being also the conclusion. The supposed argument is simply a reflection of its initial contradiction in terms. The truth confusedly grasped in the process is that happiness for us mortals soon runs out into ennui. The confusion arises from the failure to note that while it exists it is a different thing from the ennui which at length may succeed it. We have only to break away from our *kleinstädtische*, clock-tower, view of the universe as circumscribed to the present estate of the genus *homo sapiens*, to recognize the possibility of other conditions and other sentiences in which the advent of *ennui*, if it ever threatened, would be forestalled. Foolish as is the disbelief in the possibility of perfect happiness, a mere abortion of a puzzled head, logic may well wonder at the number of heads that permit themselves, at least temporarily, to be thus puzzled.

The fact remains that lesser intensities of pain vivify to the human percipient the pleasure that may accompany it. Tragedy owes its preëminence in fine art to this mental fact. Terror and pity, the intensest forms of stimulus to the perceptions, have only to be deeply veiled in fascinating drapery to bring us a more massive joy than beauty ever otherwise provides; as the contrast between "Hamlet" and "Titus Andronicus" shows - equally bloody plays, but in one the blood-stains covered, in the other bare. One must be Shakespeare's, the other cannot be. As a citizen, Hawthorne congratulated "our happy country" on its freedom from "gloomy wrong"; but, as an artist, in the same breath called the evil "picturesque." Tragedy smells of blood; yet in no other way can our present human sensibility to pleasure be so exalted as when the pains of death enhance it, and themselves die of their success.

Nevertheless, — no matter how much "A little dirt does set off cleanliness," as Hood's John Thomas replied when his master objected to his thumb-mark on a plate, — the pains that enter into works of art are in themselves but just so many blots upon perfection, in themselves but just so much subtracted from artistic value. We need only

conceive disgusting impressions intensified to the point of nauseating the beholder, visions of torture to the point of shattering his nervous poise, to unmask them as in essence aliens and enemies to beauty. It is not terror and pity, but the love that casts out fear, that leaves us "pure and prepared to rise into the stars" — "puro e disposto a salir nelle stelle." Their world reveals to us the sublime without its terror or its pity;

"But while this muddy vesture of decay, Doth grossly close us in,"

it is mortality that touches us deepest—"mortalia animum tangunt."

Thus the fine arts appear when looked at in relation to the rest of life. "Fleurs du Mal," in so far as Baudelaire's title fits, are not simply noxious; they have a canker at their heart. In unmetaphoric language, any features in a work of fancy by which it teaches falsehood, or weakens our impulses to moral good, are in the direction of ugliness, not of beauty. Contrariwise, any features which teach us truth, or fortify our regard for others, tend to increase its purely artistic value. Innocent beauty, pleasant to the taste, but neither nourishing to the mind nor fruitful to the will, stands between, at least conceivably: a pure and welcome good so far as it goes, but admitting a better. The Summum Bonum — best of all — is a tri-unity, distinguishable but not divisible into its three components Beauty, Truth and Right.

These fundamental facts the conditions of our present human sensibility tend to obscure. We sometimes are exhorted to flee pleasure as if it were an evil. On the contrary, it is the one absolute good. But pleasures, in the plural sense of things from which under certain circumstances we gain enjoyment, are often indeed both vain and

¹ Concluding line of the *Purgatorio* of Dante.

hurtful. They appear to us sporadically amid groans and travail, but they do not keep their promises, and they get us into trouble beside. This is not their fault, but ours who do not know how to use them. We give ourselves up to them,

"Fancies of good pursuing that are false
And never yield the whole of any promise." 1

thoughtless of what may come after to ourselves or our fellows; and since we find them often heightened by little pains, particularly the fancied pains of others, we mingle this ingredient carelessly with them, forgetting that it is poison and serves a tonic purpose only. Whence we mentally couple fine art and immorality as we might a gem with the dark ocean cave that bore it. Whence we conclude that fancy in itself is frivolous or worse; when it is only we ourselves who are deluded.

BEAUTY AND DIVINITY

We have not completed a review of fine art from without when we have considered its relation to the rest of life. There is another world that constantly recurs to our thoughts when they have to do with beauty. We speak of the "divine" loveliness of a statue or a painting or a poem; and of the artist as inspired from "Heaven." A drawing in an old number of the Fliegende Blätter represents a young girl among a crowd dispersing after a concert. Asked whence she comes, she answers "straight out of Paradise" — "Gerade aus dem Paradiese." Non-human faculties and non-human conditions are before our minds in using such phrases. They refer to another state of existence, another life than the present. What is this other world? What is the special relation to fine art that these habits of speech ascribe to it?

^{1 &}quot;Imagini di ben seguendo false Che nulla promission rendono intera." Purgatorio, xxx, 131-32.

To both the two great branches of civilized humanity—
the East and the West—the world they call better is a
world in which all souls find peace in the bosom of a universal Being. An inscription lately found at S. Sebastian
in Rome traces the outline both of the Nirvana of Buddhism and the Heaven of Christianity: et nos in Deo omnes
— "and all of us in God." Yet a deep distinction separates
the two; for the peace of Nirvana is a static peace, the
peace of Heaven a dynamic peace. The Bhagavad-Gita
describes a state "in which those who take refuge, never
more return to rebirth" and its "bonds of action." The
spirits in Heaven say to Dante:

"In His will is our peace";

and Milton sees them

"... at His bidding speed
And post o'er land and ocean without rest."

Nirvana gives the peace of desire annihilated; Heaven the peace of desire fulfilled as it awakens. In Heaven desire and fulfilment are fused in "the love that moves the sun and the other stars" — "l'amor che muove il sole e l'altre stelle." ¹ The pain of longing vanishes, the joy of fulfilment subsists.

Every artist creates his own individual type of what we call ideal worlds. The tingling air of Harpignies' pictures, the picturesque England of Dickens's novels, the serene or pathetic events of which we are auditors in von Weber's music, are independent, closed units within the beholder's experience. The new-Platonic Ideas of which they are made are particular things, they are in this world of ours; but they are also universals, not of this world. We cannot go on beyond the experiences of which they consist; we cannot take up our lives in pictures, novels or music. They are different, mutually isolated simplifications of our common

¹ Concluding line of the *Paradiso* of Dante.

life: new creations, yet made out of its familiar stuff, out of pigments, words, the sound of trumpets. "Forever wilt thou love and she be fair." That is not at all the way things happen in this world; yet the fairness and the love are integral parts of our everyday existence nevertheless. But the common characteristic of works of fancy is that they all essay to transplant us amid perfection; the make they aim at is that of experiences which awaken desire only to satisfy it. This is also the pattern of Heaven. Heaven cannot be found by pushing further in this universe. Wherever we go, beyond the farthest star, we must assume ignorance, clash, unsympathy and interference of desire. But the worlds of fancy present us with the fashion of Heaven; basing their essential effects, not on clash and disappointment, but on harmony and satisfaction. They are not Heaven, but they are its vestiges on earth.

The late Okakura-Kakuzo used to describe a masterpiece as a work before which one would be willing to die. He was not a man given to sentimentality, but the possessor of a most acute and well-poised intelligence. What did he mean? First, that masterpieces are the limiting cases of artistic achievement, the works that can be called per-factum—thoroughly wrought—without reserve: further, that life cannot hold for us anything better than the experience of the perfect. So far as our private fate is concerned, we have lived; for we have loved. The saying completes and deepens Mme. de Houdetot's "tout ce qui peut aimer devrait vivre" by affirming that any one who has loved is by that fact prepared to die.1 Indeed, if he must lose the perfect thing, and at once, as men often must, it may be too much to ask of limited human nature that he should wish to go on living. All men born of women know

¹ The whole reported saying is, "La vie ne devrait avoir d'autre limite que l'amour; tout ce qui peut aimer devrait vivre."

in their hearts that not fancy but fact couples love and death. Rare indeed is perfection upon earth. Yet it is not impossible. A thing is perfect when it satisfies, not all possible desires, but all the desires it awakens. The capacity to satisfy all possible desires, beside being worthless, is an unimaginable idea. All possible desires include contradictory ones, or such as it is unthinkable should be met by one and the same object of perception. The word perfect has a rational meaning only when interpreted relatively to a beholder. Absolute perfection is non-sense — the kind of mental zero produced by taking a number away from itself. True that a trough that would be perfect to a pig would excite in a man a vivid sense of imperfection. True also, that as Stuart Mill says "It is better to be a human being dissatisfied than a pig satisfied." 1 But it would be a capital blunder to infer from this truth that discontent is always divine, even in a vale of tears like ours. "If this were only cleared away, it would be grand," argued the Walrus and the Carpenter walking together on the strand. Yet would they have found it so? And if they had, the standards of the Looking-Glass population must yield to those of this world's children sporting on the shore, to whom a sea-beach without sand would be a most imperfect place. The perfect is that in which we take pure joy, but differs in kind according to the measure in which the joy is experienced originally or experienced also derivatively, as joy foreseen or imputed. These alternatives exhaust the possibilities of value; my own present joy, joy mine but not present, joy not mine. The perfect affords joy foreseen when it expresses truth, and joy imputed when it expresses virtue; the standard of perfection rising by each addition, since each connects the percipient in its own way, and both together in all ways with the universe of joy. In a word,

¹ Utilitarianism, 1.

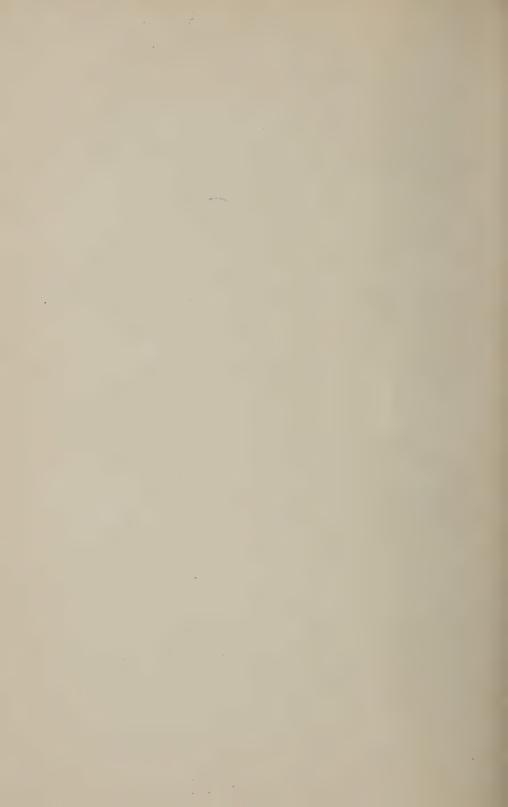
44 ..

things sometimes reach perfection in this world, sometimes satisfy all the desires they awaken, if but rarely among men; and of things that disappoint us, in truth the overwhelming majority, we may always doubt whether the imperfections noted are really lacks for us, or would be for others whose standard is higher than ours. In particular, a work of art may fill the artist with a satisfaction at once pure and superior to any which a discontented critic would experience by changing it. Such a work is a masterpiece. It is perfection incarnate. To realize that life has nothing better to offer us than the sight of it, we have only to betake ourselves to the plane on which it was created. The fancy of man is like water, which can make the commonest hollow or fearfullest abyss of earth reflect a bit of Heaven.

One is loth to leave this dazzling theme. Let us glance back over the way we have taken. Fine art is the creation of beautiful things. Beauty is the charm of things that appear happy in themselves. The crowning achievements of man's fancy stand outside him as if they were made by another hand. Fine art is a language in the sense of an utterance. It differs from a language in that the vehicle it uses does not simply carry its message but enters itself into the message. On the other hand, the activity of its formulation is no part of the utterance; though there may be parts of the utterance which none but a hand long active could supply. A beautiful thing may be self-luminous with pleasure; or it may also glow with pleasure reflected from its truth or its morality. A beautiful thing is a link between earth and Heaven, of the earth earthy, in its envelope of disquiet, but heavenly in the peace that lies at its heart. The queen of the nursery story may be an earthly queen of tragedy, but there is a queen of comedy whose lineage is divine.

\mathbf{II}

POPULAR EDUCATION IN FINE ART



POPULAR EDUCATION IN FINE ART 1

EDUCATION

Three senses of the word "education": the loose sense; the broad sense; the narrow sense — Double meaning of process and product in each sense — Confusion between loose and broad senses; between broad and narrow senses; between senses of process and product — The word "education" to be here used in the narrow, but not narrowest, sense of a process.

THE word "education" is a very ambiguous one, and the parent of much misunderstanding. It conveys the general idea of a modification of personality in three senses, which may be called respectively a loose, a broad, and a narrow sense. In the loose sense education is synonymous with influence, in the broad sense with improvement, and in the narrow sense with teaching.

The loose sense was thus defined by John Stuart Mill in his rectorial address at the University of St. Andrews in 1867: "Whatever helps to shape the human being — to make the individual what he is, or hinder him from being what he is not — is part of his education." Now every one of our experiences in life helps to shape us. Some trace is left upon us by each. We are somewhat different afterward from what we should have been had this particular event not happened. Hence, using the word in the loose sense, nothing short of the whole life history of any one constitutes his education. "Education is life." The alcohol that contributes to make the European what he is, and the opium that contributes to prevent the Asiatic from being what he might be, are educational forces. Most

² Symposium on Education, The Brooklyn Eagle (1903).

¹ Reprinted from the Report of the United States Commissioner of Education for the year ended June 30, 1913.

readers will meet this claim with a mental revolt which is proof that the loose sense of the word "education" is not the customary one, but an extravagance of speech. Those who, like most of us, believe in and wish to forward education, will refuse to admit that it includes all influences, the bad as well as the good, the demoralizing as well as the elevating. We shall demand that when people talk about education in our hearing they shall mean something good by the word. They shall not mean such influences as a fascinating scoundrel may exert upon a weak-willed companion, or such as a mental shock exerts over the reason it dethrones. Nothing shall be education for us which is not an improving influence.

This second, or broad sense of the word "education" has been analyzed with admirable clarity by President Hadley. "In the broad sense it [education] includes every exercise of activity which is valued, not for its direct results, but for its indirect effects upon the capacity of the man who is engaged therein." 1 Every experience in whose result upon the personality we can see the promise of future good; every event whose ineluctable trace upon us is formative, and neither indifferent nor deformative, is part of our education; and only such events are. Using the word in this broad sense, Richard Steele said of Lady Hastings that to know her was a liberal education. Here was a vivid and gallant recognition of a perpetual outflow of humanizing influences from a lovely woman. The remark is quoted also as a tribute of Chateaubriand to Mme. Récamier.

Yet we should not speak of Lady Hastings as an educator, nor treat of Mme. Récamier in a history of education in France. There is a narrow sense in which the word is most commonly used. Although North American

¹ Symposium on Education, The Brooklyn Eagle (1903).

vim has been traced to the dry air of our continent, the latest achievements of the United States to the impulse given by the freeing of Cuba, and no greater formative influences have ever existed in this country than the examples of Washington and Lincoln, the United States Bureau of Education does not observe and record such factors of national progress as climate, crises of history, or commanding personalities. Education as most commonly understood means more than influence, more even than formative influence. It means intentional formative influence — the purposed moulding of one personality by another. This is the common, everyday root meaning that runs through the words "education," "educator," "educational effort," "educational appliances," and the like; and this root meaning Mill expressly recognizes in the address at St. Andrews. After defining education in the loose sense in his opening paragraph he devotes the rest of his discussion to that "which each generation purposely gives to those who are to be its successors, in order to qualify them for at least keeping up, and if possible for raising, the level of improvement which has been attained." Emerson uses the term in this customary sense, alluding also to a possible broader meaning when he writes, "What we do not call education is more precious than that which we call so." The most elevating influences of all, he thinks, are those which are not intentionally applied and so not customarily spoken of as a part of education. People are moulded to better effect without formal means than by any of the apparatus we call didactic.

These three senses — the loose, the broad, and the narrow — do not exhaust the ambiguities of the word "education." Each of the three has a primary and secondary meaning duly set forth in the dictionary. The primary

¹ Spiritual Laws.

meaning is that of a process; the secondary that of its product. Education means at once the imparting of capacity and the capacity imparted; the communication of knowledge or skill and the knowledge or skill communicated. In one sense it means an operation of which the mind or body is the subject; in the other a mental or bodily condition at which the operation aims. When we say, "The control of education should be entrusted to the State," we are using the word in its primary sense of a process which the State should apply to its citizens. When we say, "Popular education is vital to a democracy," we are using the word in its secondary sense of a product which a democracy needs to develop within itself.

This manifold ambiguity affords ample room for misconception. A confusion between the loose sense, in which education means influence of any kind exerted upon the individual, and the broad sense, in which it means formative influence only, lends itself to a fatalistic optimism. If every experience is part of our education, then whatever is, is in the right direction. If the world is all a school, then all's well with it literally. A resolute faith that the world may be made better gives place to the enervating persuasion that its every detail is for the best. We dare not prevent anything lest we lose its lesson; nor dare we bring about anything, ignorant as we are whether we can better what is already for our good. So old-time doctors forbade ether in childbirth lest the lesson of its pains be lost. Through the use of one word for both improvement and influence, the glamour of the one envelops the other also. We take up our abode on the borderland of a fool's paradise.

A confusion between education in the broad sense of formative influence and education in the narrow sense of intentional formative influence tends to an opposite error.

We are misled into thinking educational effort the panacea for all the ills of society. In particular, we exalt educational effort in its narrowest sense — that of the influences directed exclusively upon the young en masse. If education — meaning formative influence — includes, as in this sense it does, every agency of personal advance, then all that need be done to insure the indefinite improvement of the individual is to look to our system of education — meaning the formal training given by each generation to the next. The glamour of the idea of the betterment of character concentrates itself upon one of the means to this end — and, as Emerson notes, one of the less precious means. Our faith in the machinery of instruction becomes unconsciously inflated beyond all reason. The school becomes a fetich. We overlook chronic failings of schooling at its best; its development of the memory at the expense of the intelligence, its comparative impotence to perfect the will. "Sir," said Wellington to his highly instructed aide, "you have too much knowledge for your comprehension." Of some royal children Henry Crabb Robinson writes: "These children are overcrammed; they know all the sciences and languages, and are in danger of losing all personal character and power of thought in the profusion of knowledge they possess." Again, furnishing the mind does not in itself direct the will. In technical language, judgments of fact and judgments of worth are mutually irreducible. There is no mental chemistry by which I see can be transmuted into I choose. However we train the mind, unless the heart be independently disposed, we are but fashioning an instrument of futility or a weapon of evil. But these criticisms of education in the narrow and narrowest senses have the ring of lèse-majesté to those whose enthusiasm is fed by the broad meaning of the term.

¹ Diary, vol. 11, p. 104.

Finally, a confusion between education in the sense of process and education in the sense of product helps toward a fictitious valuation of preparatory agencies. We come to cherish training mistakenly for its own sake. It is a common human failing to forget the end for the means. Mr. Chesterton has said that practical men generally know everything about the matter they have to deal with except what it is for. The use of one vocable for both means and end favors this shortsightedness. If education, in the sense of developed capacity, is the ideal for humanity, then education, in the sense of the development of capacity, is the greatest thing in the world. Yet this is a conclusion impossible to thinking beings. If the development of capacity is the greatest thing in the world, then developed capacity is secondary, and since an end takes precedence over its means, the development of capacity is tertiary. Nevertheless we have just asserted it primary. The way out of this self-stultifying tangle is resolutely to hold the two ideas of process and product apart, in spite of their common name, and clearly to acknowledge that it is the exercise of capacity that gives its development worth. Schooling was made for man and not man for schooling. As President Hadley has said, an educational process is one which is valued for the capacity it engenders. Only in so far as the built character emerges, as its capacities show their development in action, do our efforts in character building prove their merit. The good life, and not the business of preparing for it, is the greatest thing in the world.

For the purposes of the present discussion of popular education in fine art, it will be convenient to use education in the sense of process, not of product, and in its narrow but not its narrowest sense. So choosing among the ambiguities of the term, it will signify intentional formative influence, whatever its appliances and whoever its sub-

jects. Artistic education will denote all training in fine art, whether given in school or out, to adolescents or adults.

FINE ART

Fine art the embodiment of fancy for its own sake — Corroboration by artists and critics — Two implications: (1) a public; (2) completing the artist — The effort of appreciation — Corroboration by artists and critics — Corollaries: (1) kinship of public with artist; (2) dependence of artist on public.

Works of fine art are commonly called creations of the imagination. The definition is simple, clear, and unequivocal, but not satisfying. Is not a steam engine also a creation of the imagination, or a coal mine, or an intrigue, since all exist in the fancy of their projectors before existing in fact? Wherein does a work of fine art differ from any other plan brought to pass?

In that it is finished when it is imagined, and is put into external form only to preserve it. Dante writes: "Who paints a figure, if he cannot be it, cannot draw it: that is to say, no painter could draw a figure unless he previously made it in his mind as it ought to be."1 But a steam engine, a coal mine, an intrigue, are intended to be more than they are in advance in the mind. They are only begun when they are designed and are not done until the design is executed. They who execute them, not being "of imagination all compact" aim beyond giving "to airy nothing a local habitation and a name." An artificer in embodying his fancy may be inspired by either of two purposes — that it should exist permanently or that it should bring about something else. In the first case, the work of his hand is a work of fine art; in the second, a work of useful art. The aim of a work of useful art — a steam engine, a coal mine, an intrigue — lies beyond itself, in the flight of trains, the payment of dividends, personal fates. The aim of a work

¹ Canzone xvi: as interpreted by himself in the Convito, rv, cap. 10.

of fine art lies within itself — that it should be perceived as it has been imagined. However an artist may be governed in embodying his visions by what he aims to have them accomplish — whether to reconcile himself with Heaven, to turn his fellows to good courses, to impart to them information outside the work itself, to win himself fame, or buy himself bread — it is that in them which he puts there solely not to let it die that constitutes its substance as a work of fine art. Its artistic content is comprised within what it is and does not extend to what it does.

The avowal is met everywhere among artists and their critics. Goethe wrote: "I sing as the bird sings that lives in the branches. The song that must from the throat is a reward that richly pays." Again, "The wish for applause which the writer feels is an impulse that nature has implanted in him to entice him on to something higher," that something higher being the sharing of his happiest thought. To a strongly religious nature like Cowper poetic genius was—

"The gift To trace Him in His words, His works, His ways, Then spread the rich discovery, and invite Mankind to share in the divine delight."³

The motive of expression, essential to fine art, has been stated in sober and modest prose by our own William M. Hunt: Artists "expose their work to the public, not for the sake of praise, but with a feeling and hope that some human being may see in it the feeling that has passed through their own mind, in their poor and necessarily crippled statement." 4 Of Shakespeare, Lowell writes: "I have said it was doubtful if Shakespeare had any con-

 ^{1 &}quot;Der Haerfner."
 2 Einleitung in die Propylaen, p. 209.
 3 Table Talk. To the same effect, Dryden in his Defence of the Essay of Dra-

Table Talk. To the same effect, Dryden in his Defence of the Essay of Dramatic Poesy (Malone's ed., 1800), vol. i, part ii, p. 160.
 Talks about Art (1st series), p. 123.

scious moral intention in his writings. I meant only that he was purely and primarily poet." Again, "The question of common sense is always, What is it good for? — a question which would abolish the rose and be answered triumphantly by the cabbage" — the cabbage being good to destroy for bodily support, the rose only to enjoy while it lasts.

A work of fine art, according to these avowals, is something of which the simple contemplation is worth while; and the artist creates it that this contemplation may take place. His purpose — that the work shall be perceived as it has been imagined — conveys two implications.

First, there is involved in the conception artist — or poet in the wide meaning of $\pi o \iota \eta \tau \dot{\eta} s$, or maker — the idea of a public. Creation, in the artistic sense, implies contemplation. The maker cannot be thought without the beholder. Goethe wrote: "The artist is not conceivable alone, moreover does not want to be alone. The work of art challenges men to delight in it, and to share their delight in it." ³ Alphonse Daudet has written: "The artist is not a hermit. However one may seek to retire from or lift oneself above the public, it is always in the last analysis for the public that one writes."

Second, a work of fine art is an open letter, addressed not to particular individuals, but to any who can read it. With an outlook as wide as humanity, its aim is reached, not by every inspection of it, but only when it is perceived as it has been imagined. The artist is a half-being whose complement is the beholder who so perceives his work. This perception by the one which duplicates the imagination of the other is what is called the appreciation of fine art. In printing, when the outlines of one impression are

¹ Shakespeare Once More. ² Chaucer.

<sup>Ueber den sogenannten Dilettantismus.
Souvenirs d'un homme de lettres, p. 151.</sup>

exactly superposed upon those of another, the two are said to "register." In like manner, in order that a work of fine art should exist, the mind of the beholder must "register" with that of the artist. It is the scientific fashion nowadays to think of every activity of mind as having its counterpart in some special activity of brain — a current, or explosion, or however else we may conceive it, of a particular kind. Using this convenient theory, appreciation may be said to consist in the exact reproduction in another brain of certain currents or explosions that once took place in one perhaps long since mouldered into dust. It is in this perpetual reperformance of a strain that once beguiled a single fancy that fine art has its being.

The appreciation of fine art is therefore at once an integral part of it and a definite form of response to its creations, namely, the precise echo of the voice that bade them live. A work of art does not exist for a beholder who simply enjoys himself over it; he must enjoy it. He must make himself over in the image of the artist, penetrate his intention, think with his thoughts, feel with his feelings. Okakura-Kakuzo writes: "An eminent Sung critic once made a charming confession. Said he, 'In my young days I praised the master whose pictures I liked, but as my judgment matured I praised myself for liking what the masters had chosen to have me like." Again, "The tea master, Kobori-Enshiu, himself a daimyo, has left to us these memorable words: 'Approach a great painting as thou wouldst approach a great prince." The same comparison has been used by Schopenhauer: "One should look at a picture as one meets a monarch, waiting for the moment when it will please him to speak and for the subject of conversation which it will suit him to choose. One should not be the first to address either the one or the

 $^{^{1}\,}$ The Book of Tea, pp. 107 and 108.

other, for thereby one runs the risk of hearing only one's own voice."

This attitude is that of the understanding of fine art in the capital acceptation of that word. The picture, the statue, the building, is a sign that something once existed in the fancy of another which he was unwilling to let die. What was that something? When we have answered this question aright — always a searching question, often difficult, sometimes insoluble — we comprehend the work, and not until then. Then, and not until then, do we perceive it as it was imagined.

The testimony of those who know is united on this point also. Luther's estimate of the extent to which a reader who would understand literature needs to duplicate his author appears in the last writing from his hand. "Virgil, in his 'Bucolics,' can be understood by no one who has not been five years a shepherd. Virgil, in his 'Georgics,' can be understood by no one who has not been five years a farmer. Cicero, in his 'Letters,' can be understood by no one who has not shared in a large public life for five and twenty years. The Holy Scriptures let no one think he has thoroughly digested unless with prophets like Elijah and Elisha. with John the Baptist, with Christ and the Apostles, he has ruled religious communities for a hundred years together."2 The genuine lover of art, Goethe tells us, "feels that he must lift himself up to the artist in order to enjoy his work.3 In a comment on another remark of Goethe's, M. Paul Bourget thus describes the temper of appreciation: "Goethe expressed the principle with his accustomed depth in saying, 'If one have not studied things with a partiality full of love, what one thinks about them is not worth saying.' . . . To be partial in the sense in which the

¹ The World as Will and Representation, vol. 11, cap. 34.

² Quoted in Gedanken ueber Wissenschaft und Leben, Professor Adolf Harnack, Int. Wochenschrift fuer Wissenschaft, Kunst, und Technik, no. 1, April 6, 1907.

³ Ueber Wahrheit und Wahrscheinlichkeit der Kunstwerke, p. 294.

Altmeister of Weimar used the expression means to have given the artist due credit, to have placed oneself at his standpoint, to have associated oneself with his purpose, to have demanded from him nothing that he did not intend. . . . This power of sympathy marks the true lovers of literature, those to whom it is really a living thing." Saint-Saëns notes that the present generation can neither comprehend nor love the music of Gounod, "regarding it in a false light and giving it a significance altogether different from what the composer intended.2 The appreciation of poetry seemed almost an impossible task to Oliver Wendell Holmes. "Hardly any one ever understands a poem but the poet.... It fits the mental mould in which it was cast. and it will hardly fit any other."3 How fleeting and uncontrollable our sympathy with plastic and pictorial art may be is vividly revealed in Hawthorne's "Notebooks." Of the Vatican sculptures he writes: "It is as if the statues kept, for the most part, a veil about them, which they sometimes withdraw, and let their beauty gleam upon my sight; only a glimpse, or two or three glimpses, or a little space of calm enjoyment, and then I see nothing but a discolored marble again. The Minerva Medica revealed herself to-day." Again, of Guido's "Hope," "If you try to analyze it, or even look too intently at it, it vanishes, until you look at it with more trusting simplicity." 4 Of the Preludes and Fugues of Bach's "Well-Tempered Clavichord," Moritz Hauptmann wrote: "They are as difficult to hear as to play; and even hearing is not all of it. One must know them so perfectly that one can, as it were. create them oneself." Writing of pictures, John La Farge

³ A Hundred Days in Europe.

5 Briefe an Hauser, I, p. 2.

From the preface to France et Belgique, by Eugène Gilbert.
 Annales Politiques et Littéraires, no. 1576, September 7, 1913.

⁴ French and Italian Notebooks, pp. 166 and 173.

notes that "they are excusable who feel as if they had made the work which they admire. They become, for an instant, the man who made it." $^{\scriptscriptstyle 1}$

Two corollaries of interest result. First, the power of appreciation in every one is limited to those artists of whose natures he partakes. Second, those artists alone rise into prominence who reflect the spirit of a time. Of the limits of appreciation Sainte-Beuve writes: "According to a very acute and just remark of Père Tournemine, one admires only those qualities in an author of which one has the germ and root in oneself." 2 Okakura-Kakuzo makes the same observation. "We must remember that art is of value only to the extent that it speaks to us. It might be a universal language if we ourselves were universal in our sympathies. Our finite nature, the power of tradition and conventionality, as well as our hereditary instincts, restrict the scope of our capacity for artistic enjoyment. Our very individuality establishes in one sense a limit to our understanding; and our æsthetic personality seeks its own affinities in the creations of the past."3 Mrs. Radcliffe was another to whom this truth was plain. "But the fire of the poet is in vain, if the mind of the reader is not tempered like his own, however it may be inferior to his in power."4 Of the artist as the interpreter of his age, Joubert writes: "The writers who possess influence are those who express perfectly what others think and who awaken in others ideas or sentiments on the point of being born. It is at the bottom of the heart of peoples that literatures exist."5 Renan concludes negatively: "Wherever there is no public to nourish and inspire genius, it comes to nothing."6 In the

¹ Considerations on Painting, p. 42.

² Sainte-Beuve, Portraits Littéraires, 1, p. 71.

³ Okakura-Kakuzo, The Book of Tea, pp. 113, 114.

⁴ The Mysteries of Udolpho, vol. 11, p. 27.
⁵ J. Joubert, Pensées, p. 329.

⁶ E. Renan, Souvenirs d'enfance et de jeunesse, p. 67.

terse saying of the Chinese sage Lao-tse: "If a noble man finds his time, he rises; if he does not find his time, he drifts."

A last question transfers the discussion of fine art to a wholly different order of ideas. Defining it as fancy brought into being for its own sake, is its existence justified independently of other results? We have here left the sphere of what is, and entered that of what should be. The transition is obscured in the familiar contention over "art for art's sake," which like most disputes, owes its difficulty to its complexity. Besides confusing the nature of fine art with its value, the phrase compresses at least four questions regarding its value into one debate. Should men devote time and labor simply to immortalizing happy thoughts? Yes. Are the charming aspects of evil things fit subjects of fine art? Sometimes; tragedy, for example. Should an artist embody his conceptions without regard to their influence? He cannot. Are not the most captivating fancies and the most consummate utterances always the indirect result of useful aims? Not always. But however these and other questions of worth may be answered, the truth remains that the sole factors of artistic creation are a moment too good to lose and a hand cunning enough to hold it. Its essence is expressed in the exclamation of Faust: Verbleibe doch! Du bist so schön! 2 (Remain! Thou art so beautiful!) The artistic motive, mixed though it always is with others, is in itself the impulse to impart imaginative joy for its own sake.

EDUCATION IN FINE ART

Education in fine art may aim to form either artists or publics.

The content of a work of fine art is the imaginative joy to which it owes its being; and in the apprehension of this

¹ Tao-te-King, 600 B.C.

² Goethe's Faust, 1st part, Studierzimmer.

content by a beholder the work is consummated. Fine art, being in its entirety the union of creating and beholding, offers to education a twofold opportunity. Formative influence may be applied by intention either to develop creators or to develop beholders. The purpose to develop creators is narrowly special. Poets are born, not made, and their ratio to the total of births is always small. Nor could a large proportion of the community be spared from the realities of life to devote themselves to imaging its ideals. As a matter of actual statistics, those who make fine art in any form their profession, whether as artists or so-called artisans, are but a minute fraction of the whole population. But the purpose to develop beholders is widely general. Every one can be, and in greater or less measure is, a beholder of works of art.

Every one ought also, in his way, to be an artist. Let us not forget this. All work should be accomplished with joy that a good deed is born into the world and should contain something to communicate that joy. But in this wide and unaccustomed sense education in fine art would merge into the education that teaches us how to do anything noticeably well. When it stops short of this it remains the special training of a few.

POPULAR EDUCATION IN FINE ART

Popular education in fine art the formation of publics — Fine art surrounds real life with an endless galaxy of ideal worlds, citizenship in some of which is the birthright of every one — Popular education in fine art should not be mainly technical, nor historical, but critical — A scheme of popular education in fine art through criticism.

Hence, popular education in fine art, meaning by this phrase an artistic education which is owed to every one, consists in forming beholders. The phrases "education in appreciation," "teaching the enjoyment of works of fancy," express its appropriate sphere. The advice of Aristotle

regarding training in music was, "Let the young pursue their studies until they are able to feel delight in noble melodies and rhythms."1 They were to be trained not to make but to like; not as poets but as lovers of poetry. The injunction still demands emphasis. Fenollosa writes: "... We find prevalent discussions and experiments concerning the teaching of art in schools so permeated with the tacit assumption that its main purpose is to provide an incipient training for possible painters and sculptors, that warning seems necessary. This is to lose sight of the great public value of art. Is it for this that we teach so widely the other fine arts — music and literature? Do we aim. by our musical instruction in schools, in time to train up a nation of eighty million composers? Are our courses in literature devised to transform us into a community of poets? Public education in art does not look so much toward creation as to comprehension." In another sphere Aristotle's counsel has been lately voiced by President Wilson. "A university is a place where the many are trained to a love of science and letters, and a few only to their successful pursuit."

That the many should have their share in the life of the imagination, and hence have the right to receive aid therein, admits of no serious doubt. The real experience of no one is so rich that he can afford to dispense with imaginative experience; nor so poor that he cannot take advantage of it. Uhland writes: "Who sees alone what is, has lived his life." ³ Yet what is fine art, it may be asked, but a copy of nature? Were it not better to study the original rather than reproductions that never can equal it? The objection betrays a radical misunderstanding of the relation between

¹ Politics, VIII, 6.

² E. F. Fenollosa, "Art Museums and their Relation to the People," *The Lotus*, May, 1896.

³ "In ein Stammbuch."

art and nature. Fine art is to be compared, not to a mirror, giving back as close a copy as may be of the scenes before it, but to a sky in which new counterparts of earth eternally appear. It is an exhaustless firmament about the real world, incredible as may sometimes seem the endless birth of new luminaries therein. John Stuart Mill relates that at one period of his early life "I was seriously tormented by the thought of the exhaustibility of musical combinations. The octave consists only of five tones and two semitones, which can be put together in only a limited number of ways, of which but a small proportion are beautiful; most of these, it seemed to me, must have been already discovered, and there could not be room for a long succession of Mozarts and Webers, to strike out, as these had done, entirely new, and surpassingly rich veins of musical beauty. This source of anxiety may perhaps be thought to resemble that of the philosophers of Laputa, who feared lest the sun should be burnt out." 1 It is indeed hard for us now to share in the fear. For we look back upon the immense development of music since Mill wrote, upon Verdi, upon Wagner, upon Debussy; and out upon the musics of other continents, with their unheard-of complexities of rhythm, their differing tones and semitones, their alien keys and modes, their independence of the octave itself. As each true servant of the imagination is born, a new type of ideal existence adds itself to real life for every kindred soul. When we turn from nature to art we take our way into happy worlds which gifted men have formed and are ever forming anew from the materials of this sorrowful earth, as the kaleidoscope forms figures from its bits of glass.

Popular education in fine art, if directed as it should be upon the development of comprehension, will include but

¹ Autobiography, chap. v.

a modicum of technical instruction. More would be useless, and even defeat the aim pursued. The problems and methods through which an artist struggles form no part of the imaginative joy he seeks to impart. They are but means to that end. The scaffolding is not a part of the building, nor the stage-machinery of the spectacle. Technical knowledge aids a beholder only if it bring to his attention elements in a work for which his eyes are too dull. It is at the same time a hindrance by diverting his mind from the work itself. Francesco d'Ollanda reports Michel Angelo as saving, "What one has most to work and struggle for in painting is to do the work with a great amount of labor and study in such a way that it may afterward appear, however much it was labored, to have been done almost quickly and almost without any labor, and very easily, although it was not." 1 Unless the Latin maxim Ars est celare artem is mistaken in demanding that a beholder should not follow the poet at work, pedagogic theory is mistaken in demanding that he should. Not artists, immersed as they must be in technique, are the best critics. but "those who have failed in literature and art" as Lord Beaconsfield wrote in Lothair; or, as it may be added, those who would have failed had they not known better than to try. The true beholder, in the words of Herr von Seydlitz, is he "who can partake in the joy of creation, while sparing himself its travail pains."2

Neither will education in appreciation assign a large place to the history of art. Its study is a study of the relations between the artistic monuments of different times. The comprehension of art is the study of these monuments themselves. No two objects of attention can well

(February, 1901), p. 223.

Third Dialogue on Painting with Michel Angelo. Quoted in Michel Angelo Buonarroti, by Charles Holroyd, p. 326.
 R. von Seydlitz, Monatsberichte ueber Kunst-Wissenschaft u. Kunst-Handel

be more different than a relation and the objects between which it holds. It will be said, different as they are, knowledge of the one helps to a grasp of the other. True, to the abstract recognition of one or other perhaps unessential point. Like technical knowledge, historical knowledge offers a crutch to observation. It may direct the eyes that need directing; and it may also direct them to no material advantage. Professor Adolf Philippi writes, "First see, then read — for those who need reading, and many never need it at all." Professor Carl Neumann advises to the same effect. "The historical understanding of a work of art is advanced when we look at it in connection with other works of the same master and time, and of earlier and later times; its artistic understanding is advanced hardly a step by the process — at most in that the comparison and contrast of different works sharpens and trains the eye." And again, "How often is one asked — . . . 'What art history is to be recommended in order to awaken an understanding of art?' But one answer can be given. 'No art history at all. The way to art lies through the individual artist." Comparing the content of a work of art with the influences it represents, Professor Justi writes: "The more one grasps this worth — incomparable, and independent of all historical connections — the further are removed these side issues." 2 Of the dependence of Leonardo on Verrocchio, Mr. Berenson writes: "Would the full realization of this dependence help us to appreciate and enjoy Leonardo as an artist? No, for the term 'artist' from the æsthetic, the only point of view we may admit, signifies nothing more nor less than a summation of works of art; and unless we have enjoyed and appreciated these, much though we may know about the man, his manners, his environment, his temperament, his anything you

¹ Carl Neumann, Rembrandt, Preface.
² С. Justi, Velasquez, п, р. 271.

please, we shall know nothing of the artist." For we shall know only things related to his work, not the work itself; and in the process of relating them to it, joy in the work — the essence of its comprehension — evaporates. Théophile Gautier wrote, "The necessity of analyzing everything has made me necessarily and irremediably sad"; and La Bruyère had learned the same lesson. "The pleasure of criticising deprives us of that of being acutely touched by very beautiful things." As the history of art is actually taught in books and lectures, its only serious value for the understanding of art begins when it ceases to be art history and becomes comment on one or another individual work by one or another master — in a word, criticism.

For instruction by criticism is the essential element in the teaching of artistic understanding, and should be the predominating element in popular education in fine art. Criticism in no degree hostile, be it said; for in reality there is no such thing as hostile criticism. A hostile critic is a contradiction in terms; as if one should speak of bloody ermine. The sentence of Goethe just quoted from M. Paul Bourget is an unassuming rendering of the magnificent words of St. Paul, "Though I speak with the tongues of men and of angels and have not love, I am become as sounding brass or a tinkling cymbal." Sainte-Beuve, the master critic of the France of a generation ago, often quoted with approval a sentence of Joubert: "The charm of criticism is the penetration into other spirits." The true critic is an alter ego of the artist; loving his work as the artist himself loves it, if no less conscious of its imperfections. He is the ideal beholder, and it is from him that all

¹ Bernard Berenson, Drawings of Florentine Painters, 1, p. 35.

² Letter to his daughter, quoted in the *Figaro*, 1888. So Renan, *Souvenirs* d'Enfance et de Jeunesse, p. 318.

³ J. Joubert, *Pensées*, p. 327.

effective training in beholding must come. On him the whole fabric of popular education in art must rest. To amplify the problem of Aristotle, How can we win the people to delight in noble art of every kind? Not by technical training beyond the rudiments, nor by the history of art; but by leading them into the presence of noble art in the company of those who themselves delight in it. M. Anatole France describes the rare joy of "visiting some old and magnificent monument in company with a savant who happens at the same time to be a man of taste and intelligence, capable of thinking, seeing, feeling, and imagining." 1 Professor Lichtwark, recounting his experiments with school children in the study of pictures, writes: "Whoever does not heartily enjoy art had better leave this kind of instruction for others. As well might a person who does not care for music give music lessons." 2 M. Emile Faguet has this type of education in mind when he writes: "Taste cannot be imparted, I repeat. . . . Nevertheless, if one cannot instruct others to have taste, one can show taste in the presence of others and incite them to give proof of it. ... Only incite them, it is true, but strongly incite them. ... Contact with, and even shock, from a man of taste, rouses, stimulates, vivifies, sets in motion those capable of taste.... This is not instruction, but intercourse; an intercourse not giving taste, but accustoming and inspiring others to have it." No better instances of what M. Faguet proposes could be given than his own studies in literature. They illustrate in perfection what Matthew Arnold has called the highest office of the critic. "Surely the critic who does most for his author is the critic who

¹ Anatole France, La Vie Littéraire, 11, p. 28.

³ Emile Faguet, "L'Esprit de la nouvelle Sorbonne," Revue des Deux Mondes, April, 1911.

² Alfred Lichtwark, Exercises with a Class of School Children in looking at Works of Art (Dresden), p. 27.

gains readers for his author himself; gains more readers for him, and enables those readers to read him with more admiration." 1 So Stapfer compares the critic to Mercury — "the gods' interpreter to men." 2

Chosen companionship in beholding is the corner-stone of an effective popular education in fine art; a corner-stone as yet left aside in our educational system. Its accredited surrogates are still, in the main, instruction in the technique and history of art; plainly because of two great practical difficulties in the way of instruction in its understanding. The capacity of appreciation is limited in every one, among teachers by profession no less than others; and in part for physiological reasons - narrowly limited among the young. Those who instruct in the technique and history of art throughout the land would be more than human could they warmly respond to more than a fraction of the creations of the arts they represent. Again, works of fine art are the product of brains full grown and fully furnished, while the nerve centres of adolescents are but partly developed, nor has experience of life cut the nervous channels where are stored the materials of fancy, and through whose excitation alone the beholder becomes an alter ego of the artist. The fire is insufficient in the teaching body and the materials to create a blaze in the body taught. A wide training in the comprehension of fine art calls for teachers far beyond the ranks of the profession; and for disciples far beyond the roll of our schools and colleges in every age and occupation. To be really popular, education in fine art must be organized mainly as an addition to our existing machinery of instruction. Its task will be to offer to the whole population, old and young, the opportunity to contemplate works of art in the companionship

² P. Stapfer, Shakespeare et l'Antiquité.

¹ Preface to his selection from the poems of Byron. So Henri Lavedan in Le Manuel du parfait Critique.

of persons to whom these particular creations make special appeal. Such a system would proceed by the formation of groups for the study of public monuments of art, of the works of literature in our public libraries, of the pictures and sculptures in our public galleries and museums of art, of current concert programmes, or operatic and dramatic performances. It would act through a corps of amateurs of art, in the true and etymologic sense, each choosing the sphere of his predilection, and held to no service beyond. So organized, the whole available culture of the nation would be enlisted in the cause of its own extension.

CULTURE

The appreciation of fine art is what is called "culture" — Lack and need of culture in the United States — Final ambiguity in the word education — Instruction in culture does not insure education in it — Let patience have her perfect work.

What is the meaning of this often-used and often-abused word "culture"? Lord Rosebery has just called culture "the intelligent enjoyment of literature," or, as we may interpret him, such an enjoyment as corresponds to the intention of the writer. He was speaking in a university, or would, we may believe, have included fine art in any of its manifestations. So amplified, the phrase would run,"the intelligent enjoyment of works of the imagination." The definition given by Matthew Arnold implied a similar limitation and conveyed the like idea. Culture is "to know the best that has been thought and said in the world"; 2 not to know it abstractly, but "to feel and enjoy" it "as deeply as ever we can"; 3 tasting its sweetness as well as opening our eyes to its light, in the two words of Swift made famous by Arnold himself a generation ago. In culture we cross the line between the real and the ideal; be-

¹ Rectorial Address at the Quincentenary of the University of St. Andrews, Scotland.

² Literature and Dogma. ³ Introduction to Ward's English Poets, p. xxii.

tween our fortunes and our preferences. We cross the line also between the formation of capacity and its exercise; passing from preparation to fruition, from life for the sake of something else to life for its own sake. Returning to President Hadley's definition of education in the broad sense — "any activity which we value not for its direct results, but for its indirect effects upon the capacity of the man who is engaged therein," culture appears as its complementary opposite — an activity which we value not for its indirect effects upon capacity, but for its direct results. It is the acceptance of an imaginative joy given us for its own sake by a man endowed with the rare power to offer it. It is that activity of the spirit which we have here learned to call the ideal beholding of a work of art.

Of this ideal beholding some of our latest visitors from Europe tell us we of the United States do exceedingly little. Concerning his American students in French literature Professor Lanson writes: "Whenever I offered them a subject of study, they said to me at once 'What must we read?' and when I answered 'The text of your author' I could notice that they were a little surprised, that the direction seemed meagre to them" — an attitude due, as Professor Lanson finds, at once to "an unskilful application of erudition" and a complete absence in American instruction of the exercise called in France "the interpretation of texts." 1 Mr. Lowes Dickinson writes: "In America there is, broadly speaking, no culture. There is instruction; there is research; there is technical and professional training; there is specialism in science and in industry; there is every possible application of life to purposes and ends, but there is no life for its own sake." 2 The indictment is true. It is only in speaking narrowly and having

Gustav Lanson, Trois Mois d'Enseignement aux États Unis, p. 157.
 G. Lowes Dickinson, "Culture," The Cambridge Review, no. 18 (1909).

regard to sporadic instances, largely unacknowledged, that life in the imagination for its own sake can be said to exist in the United States. Every day brings confirmation. A prominent artistic organization lately offered a large prize for a monograph upon a noted collection of art in the expressed hope of eliciting "the standard work of appreciation of the collection for all time to come." Since "the standard work of appreciation" of a collection presupposes spiritual twinship between the critic and the artists represented, a writer capable of fulfilling this hope would unite in his own soul those of Van Dyck, Luca della Robbia, the Sung artists of China, or others similar. Either the proponents of this contest believed that such an intellectual prodigy existed among us, or they had no adequate conception of what the appreciation of art involves. A recent review of a translation of Heine's poems begins: "To readers without some working knowledge of German, Heine has always been a mystery and — to lift the veil from another of those facts of life well known but seldom mentioned — a disappointment." It seems not to have occurred to the writer, despite his air of kindly assurance, that a reader without "some working knowledge of German" never has read Heine and is "disappointed," not by the poet, but through his own inability to read him. As well be disappointed with the lark that one has heard only in captivity. Two prominent newspapers, one in Chicago, one in Boston, extol different books in the words, "To be appreciated this book must be read" — as one might say, "To be appreciated this symphony must be listened to, or this picture must be looked at." Reluctantly we must conclude to a notable lack of cultivation among instructed people in America.

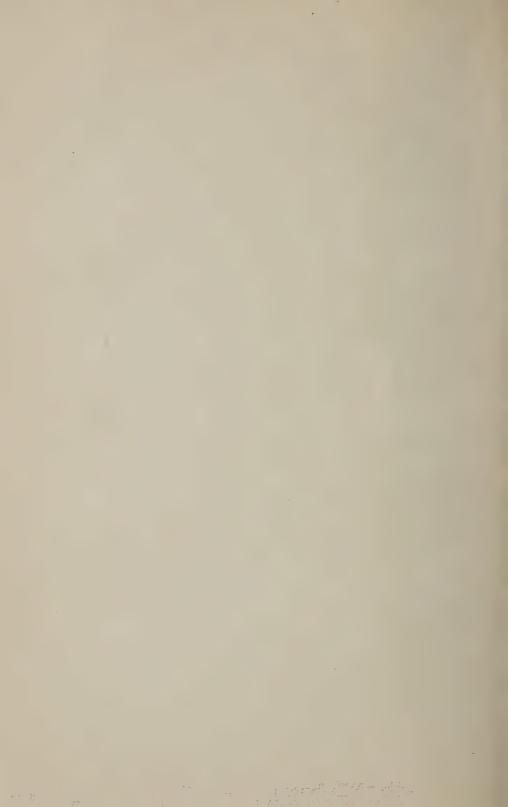
For what commonly passes for culture among us is at best only instruction; not the activity of apprehending and

feeling ideals, but the activity of trying to prepare for such an apprehension and feeling. Since it is possible to try to enjoy all types of creative fancy, though wholly impossible for any one to succeed in more than the appearance of enjoying them all, a single narrow interest — that of appearing interested in things of the spirit - has usurped the place of the infinite variety of interests which the spirit can genuinely nourish. Instructed, the classes which represent culture among us are; but not, as classes, cultivated. Lowell called the people of this country "the most common-schooled [it might now perhaps be added, the most college-bred and the least cultivated people in the world." As a people we sorely need to realize that culture is not a making ready for life in the future but a practice of life in the present; not work but play; not tepid and supercilious but warm and gracious; not the issue of spiritual notes ostensibly payable on demand, though always in the event extended, but the payment of a specie of the soul, as occasion calls. The world position which the United States has assumed within recent years makes the duty of an international culture — of a penetration of the spirit of other peoples, a recognition of their ideals, and as far as may be a sharing in them — our instant duty. This patriotic obligation will be sooner met, we shall sooner take our place with intelligence and sympathy at the council table of the powers, if we clearly realize that it is of a piece with the real significance of the common phrase — the appreciation of fine art.

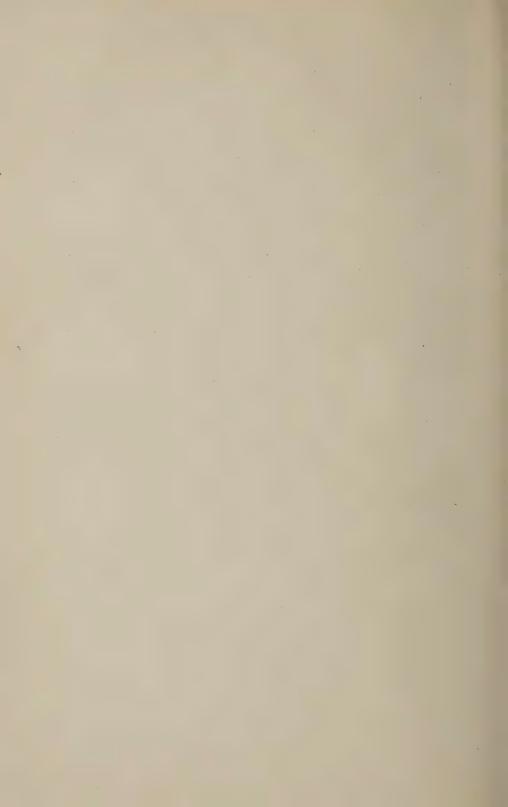
A final ambiguity in the use of the overburdened word "education" brings the number of its familiar meanings to ten. The modification of personality either pure and simple (the loose sense), by improvement (the broad sense), by teaching (the narrow sense), or by schooling (the narrowest sense), either as process or product, make up eight

meanings; and the processes of teaching and schooling, in their two acceptations of the contribution of the pupil on one side and the teacher on the other, complete the ten. Professor Gildersleeve warns us that "Education is the normal development of the powers that lie in man's nature, and is not to be confounded with instruction. which merely furnishes the means and appliances of education." There is, on the one hand, the actual development of capacity in the taught, and, on the other, simply the use of means toward this aim, apart from success or failure. In the one sense education means the activity of learning, in the other, the activity of teaching. The question "Does education really educate?" signifies by the noun the share of the instructor, and by the verb the share of the pupil. The distinction has been wittily expressed in a new rendering of an old proverb, "You may send a boy to college, but you cannot make him think." The sending of our whole people to a college of culture added to our present educational system might still do little to make them think. Let it suffice us to be assured that what little it should do would be well worth the pains. Professor Nash has said: "We men and women of to-day are standing on the verge of a future whose course it is impossible to foresee. If we are to play our part through, if we are to follow our duty home, we need both a cool head and a warm heart. The geologian deals with æons as an oriental monarch with his people's gold. To the impassioned reformer a year is an age. The need of our time is a manhood that shall gain a little - just a little - of the geologian's timesense." 2

Basil L. Gildersleeve, "The Limits of Culture," Essays and Studies, p. 13.
 Henry S. Nash, Genesis of the Social Conscience, p. 2.



THE AIMS OF MUSEUMS THE IDEAL OF CULTURE



III

THE AIMS OF MUSEUMS

THE IDEAL OF CULTURE

Ι

DR. GOODE'S THESIS AND ITS ANTITHESIS 1

An often quoted sentence from a paper by Dr. George Brown Goode, former Assistant Secretary of the Smithsonian Institution, runs as follows:

An efficient educational museum may be described as a collection of instructive labels each illustrated by a well-selected specimen.²

Is this thesis applicable to museums indiscriminately? In a museum of fine art, are the labels really more important than the exhibits; or are the exhibits more important than the labels? Is a museum of fine art at bottom an educational institution or an artistic institution?

A visitor from another planet might smile over the question whether an institution dedicated to art ought to be managed in the interest of science. Yet adherents to Mother Earth may be pardoned for the unwillingness that some of the best among them have shown to express an opinion one way or the other. A decade ago an obituary notice of Prince Troubetskoy, Director of the University of Moscow, contained the news that he had "risked all his

¹ Reprinted from the Proceedings of the American Association of Museums, vol. ix (1915).

² Dr. G. Brown Goode: "Museum History and Museums of History," a paper read before the American Historical Association in Washington, D.C., December 26-28, 1888; reprinted in the Report of the Smithsonian Institution (1897), part II.

popularity by a speech made at a recent meeting of the students of the University, in which he said that study should be the primary purpose of the University and that political or other agitation should be only a secondary aim." The question whether a museum of fine art is at bottom an educational or an artistic institution, despite its Philistine ring, is one likewise to be treated seriously.

Two words in Dr. Goode's formula should warn us against the grievous injustice of condemning as a Philistine a writer so active-minded, acute, and liberal. His thesis is expressly restricted to "educational" museums whose contents are "specimens." Looking further through his exposition, we come upon many plain indications that he grasped, if he did not consistently pursue, the idea of museums non-educational in type, to whose contents the term "specimen" might not apply. He writes of "fine art collections, best to be arranged from an æsthetic standpoint, by artists"; and again, of collections of artistic masterpieces as "shrines" and "heirlooms"; and again of "many so-called museums" as in reality "permanent ex-

¹ In the Boston Evening Transcript of October 12 and 28, 1899, the writer contributed two letters to an animated discussion starting from Professor Goode's thesis. The debate was reawakened five years later in connection with the preparation of plans for the present building of the Museum of Fine Arts. Careful and acute arguments in defence of an artistic theory of art museum management were contributed by Professor Mather to the Atlantic Monthly ("An Art Museum for the People," December, 1907) and to the New York Nation ("A Selective Art Museum," vol. 82, p. 422). The controversy was followed with interest in England. In writing from America to the Burlington Magazine of April, 1906, Professor Mather accurately defined the issue as the question whether the museum of art "should be primarily educational in intent, or whether in its conduct the æsthetic should have preference over scholastic considerations." An editorial article in the Burlington for September, 1908, noted the influence of the æsthetic theory upon museum arrangement, and drew the conclusion that "to something of this nature it seems likely that the larger world-museums must approximate when they begin to be fully conscious of their purpose and function in the modern world.'

² "Museum History and Museums of History," Report of the Smithsonian Institution (1897), part II, p. 76.

^{3 &}quot;The Museums of the Future," Report of the Smithsonian Institution (1897), p. 252.

hibitions."¹ Nor did he offer even his latest ideas on museum administration as finished results, but expressly as material for critical discussion. Yet the criticism he hoped for has hardly taken place. On the contrary, one telling sentence of his has been, as it were, preserved in alcohol, as a final word on the whole subject.

What is a "specimen"? Has the idea any opposite?

We call an object a specimen when we think of certain qualities in which it resembles other things. We call it on the other hand a unicum when we think of qualities in which it differs from any other thing. Now, nothing is absolutely unlike anything else; even a hawk and a handsaw are alike in having teeth. Nor is anything absolutely like anything else; even two peas differ in their strain on the pod. Hence anything we please is always both a specimen and a unicum. It is more or less like other things, and hence a specimen; and it is always also just itself and nothing else, and hence a unicum. But although every object is at once specimen and unicum, it may be that we value it in either way more than we value it in the other; and this is the practical significance of the two words, specimen and unicum. A specimen is a thing we talk of and treat with reference to its resemblances to other things. Its value, as we say, is illustrative, residing in its abstract bearings. A unicum is a thing we talk of and treat with reference to its differences from any other thing. Its value, as we say, is individual, residing in its concrete self. This is the kind of regard we feel for individuals par excellence, or persons. The feeling of Americans for Lincoln is not admiration for a group of qualities — for patience, acuteness, strength of purpose, kindliness, homely wit — but for these and countless other traits as they are embodied in the individual life

¹ "The Principles of Museum Administration," Report of the Smithsonian Institution (1897), p. 198.

we recall under that name. When Olivia catalogued her charms — "item, two lips, indifferent red, item, two grey eves with lids to them, item, one neck, one chin, and so forth" — she had already divined that the Duke cared for her, not as the one woman in the world for him, but as a specimen of womanhood. Contrariwise, the passion that impels the artist is not a passion for abstract qualities but for a concrete object, limitless source of abstractions, as it grows under his hand. There is but one Venus of Melos, but one Lycidas. There is but one Moonlight Sonata of Beethoven, and but one Three Trees of Rembrandt, many as are the renditions of the one and impressions of the other. Thus we speak quite naturally of the friendship of fine art. The feeling which the artist's other half — the true beholder of his work — feels for his creation is in turn unique, like the regard we entertain toward a human being.

When, therefore, we apply Dr. Goode's formula to collections of fine art we find it talking nonsense, just as a formula of mathematics talks nonsense when applied to facts it does not fit. For a collection of works of art is not a collection of specimens, but a collection of their opposites, namely, unica. More precisely, our primary purpose in showing things concrete in aim is itself concrete and not abstract. In speaking of museums of art Dr. Goode's thesis must be dropped and an antithesis substituted. Their essential nature is not that of collections of abstractions illuminated for us by examples, but that of collections of concrete things introduced to us by ideas. This is the antithesis which is needed and which had been recognized from the beginning at the museum where the controversy started.

The distinction admits of many forms of statement. Museums of science aim first at abstract knowledge, museums of art at concrete satisfaction. A museum of science

is a place of pleasant thought; a museum of art a place of thoughtful pleasure. A scientific museum is devoted to observations, an art museum to valuations. A collection of science is gathered primarily in the interest of the real; a collection of art primarily in the interest of the ideal. The former is a panorama of fact, the latter a paradise of fancy. In the former we learn, in the latter we admire. A museum of science is in essence a school; a museum of art in essence a temple. Minerva presides over the one, sacred to the reason; Apollo over the other, sacred to the imagination.

Thesis and antithesis follow deductively. An object of science being specimen, and an object of art unicum, in a museum of science the accompanying information is more important than the objects; in a museum of art, less. For while both are collections exemplifying human creative power, in the museum of science the creation is the general law represented by the description; in the art museum, it is the particular fact presented by the object. Thus, as Dr. Goode well said, in a museum of science, the object exists for the description; but as he was not yet ready to say, in a museum of art the relation is reversed — the description exists for the object. A museum of science is in truth a collection of labels plus illustrations; but a museum of art a collection of objects plus interpretations.

THE TRIPLE AIM OF MUSEUMS OF FINE ART1

My points are three: (1) to state the aim of fine art; (2) to give the reason why art has this aim; (3) to determine the main purposes subserved by museums of fine art and their order of precedence.

1. What is the aim of fine art?

There are two radically different ways in which we may be said to know anything. "Je connais" means "I know"; "Je sais," "I know"; but the first means acquaintance, the second information, two very different things. To be acquainted with anything means to have experience of it; to be informed about it means only that this thing has been an object of our thought. Romeo's exclamation, "He jests at scars who never felt a wound," brings out this distinction between acquaintance and information. The topic of love had occupied his comrade's thought, more perhaps than his own, but it was his fate alone to experience the passion. We say, "Practice what you preach," meaning again that to talk about a matter is a very different affair from living it through. "Let not him that girdeth on his harness boast himself as he that putteth it off." Why? Because the former boasts about an object of thought, the latter about a subject of experience.

This difference admitted, just wherein does it consist? In this, that to be acquainted with a thing is to know the thing itself; to be informed about it is to know its relations to other things. Benvolio and Mercutio knew love in all its bearings, in its causes, its signs, its results, but

¹ Reprinted from the Proceedings of the American Association of Museums, vol. 1 (1907).

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they had not known the thing itself that springs from these sources, has these manifestations, and bears these fruits. There is no more fundamental distinction known to man than that between things and the relations of things, and it is this deep difference that obtains between acquaintance and information. To be acquainted with a thing is to have enter one's consciousness the sensations, the thoughts, the feelings, into which that thing can be analyzed. The event called the battle of Waterloo consisted, among a myriad other matters, of the flash of guns, the sight of reddened soil, and of bodies of men in movement, the volleys, the cries, the efforts, the terrors, the rage, the despair, the unimaginable torture, the dumb approach of death; all the infinite abyss of experiences that passed in scores of thousands of souls a hundred years ago on the Belgian plain. To be informed about a thing is to turn one's thoughts upon a complex of experiences of which it is composed. To know about Waterloo is to learn its date, its theatre, its progress, its causes and results, its place in the lives of the participants and of the nations they represented; in short, to envelop it in any web the thoughts are capable of weaving with reference to that past event.

This distinction being admitted and being clear, my first point is that the aim of art is to impart knowledge in one of these senses and not in the other. The aim of the artist is that we should become acquainted with his product, not that we should be informed about it. The thing itself, and not its bearings, is what the artist is interested in and wishes us also to admire. Though we master the whole literature of Balzac criticism, yet if we never read one of his works, we shall have wholly missed his aim in writing them. Hence it is that the artist is called $\pi oi\eta \tau \dot{\eta} s$, the creator of things. For what is a thing, and what is it to create? A thing philosophically analyzed is a bundle of experiences, a cer-

tain combination of sensations, thoughts and feelings, and to create is to bring into being the permanent possibility of such a complex. This is what the artist does. The aim of his creation is that others after him should in contact with his work see, think, and feel with his eyes, brain, and heart. A work of fine art is, therefore, a record of experience, made in order to acquaint others with his experience. It is a language made to communicate this experience to whom it may concern.

It is true that any bundle of experience, any thing, can be reasoned about, as well as perceived. We can turn our minds from the thing itself — for instance, a work of art — to its bearings upon other things. We may not only go through an experience, we can also weave a limitless web of thought about it. But from the point of view of the artist any such web of thought is a by-product of his work. The immediate purpose of language, and of fine art as one form of it, is to communicate something, not to elicit a response. The spectator's perception of a creator's achievement, his apprehension of all that it was made to be, — this it is, that completes an act of creation. The Book of Genesis records the fulfilment of the creative purpose when after each day's work "God saw that it was good."

2. Yet a world or a work of art surely must exist for something, we may say. This is my second point. Why does art pursue the aim it does? This aim, we may admit, is to perpetuate a certain experience, to put it permanently in the power of others to live over again certain moments of the artist's life. But what for? What is the use to the many of this vicarious existence through a few? Shall we say to broaden our minds? The question then recurs, what is the use of broadening our minds? Not to lose time in thinking up further answers, let us call this use, this purpose, whatever it is, C. Again the question recurs, — what

is the use of C? Let us say D. Well, what is the use of D? Let us say E. Evidently there is no end to this chase, until we reach something valuable in itself and not solely valuable through an ulterior use. Either nothing is worth while, the whole universe vanity, life not worth living, or some things are desirable for their own sake. Such things certainly exist. Virtue is one, unless the common phrase, "Virtue is its own reward," is an empty claim. Happiness, another, for who asks what use there is in being happy?

We return, then, to our starting point with a new question. May not the experience which an artist is impelled to record in a work of fine art be a valuable thing in itself? May it not be that the motive which gives rise to what we call the fine arts is the fact that certain of our experiences, capable of outward embodiment, are too precious in themselves to lose? This is indeed the common opinion. Emerson repeats it in his "Beauty is its own excuse for being."

These two conclusions, as to the aim of fine art and the reason for this aim, may thus be summed up:

The Aim. To acquaint others with the product of our own fancy (not to develop information about this product).

¹ True that works of fine art have value through their fruits, as well as in themselves. They are useful, both without the maker's intention and with it, as well as beautiful. Their friendship forms spirit and style, and most are expressly designed to subserve ends apart from that of conveying their content - the painting, to fill a space upon the court-room wall and rest the eyes and refresh the minds of the throng below — the sculptured group to honor and protect the dust it covers. Moreover, the intended use of a work of art may be, and often is. the chief purpose of the maker, rather than its beauty. Like Demosthenes, aiming rather at a march against Philip, than at impressive persuasion, he may be artisan, the purveyor of means, before he is artist, the creator of ends. Still further, the idea of the intended use of a thing may become to us part and parcel of the thing itself; the ship may be gallant, the weapon cruel. Beautiful as a useless or noxious creation may be, another at once salutary and more beautiful is conceivable, and, as we may trust, actual. But it is the idea only of utility that may thus contribute to beauty; the reality remains wholly apart from it. Artistic value and practical value differ as the nature of a thing from its effect; beauty entering into the work, utility flowing from it.

The Reason. Because this acquaintance is itself worth cultivating (not because it brings us ulterior advantages).

Here we have two distinctions:

- (1) Between acquaintance with, and information about, works of art.
- (2) Between the good they are (exemplified in their beauty); and the good they do (their utility).

Fine art is concerned with the first member of each of these alternatives. The creative artist aims that beholders should be *acquainted* with a fancy whose *inherent worth* has inspired its perpetuation.

3. Upon this understanding of the aim of fine art and the reason for its pursuit, what are the main purposes of a museum of fine art and what the order of their precedence?

Returning to the two alternatives just stated, the second and extra-artistic member of each still remains to be considered. We may, first, not only acquaint ourselves with works of fine art as the artist intends, but inform ourselves about them; and, second, not only enjoy their beauty, which is also his intention, but profit by their utility. Hence out of these two distinctions there emerge finally three possible attitudes toward a work of fine art:

- (1) The artistic; the attitude of the seeker after appreciative acquaintance with the work, in accordance with the artist's intention.
- (2) The scientific: the attitude of the seeker after information about the work, independent of the artist's intention.
- (3) The practical; the attitude of the seeker after results from the work, also independent of the artist's intention.

The influence of any permanent public exhibition of fine art, any art museum as it is called, is exerted upon persons taking each of these three attitudes. They are represented respectively by three clearly distinguished, but not mutually exclusive, classes of visitors. The artistic attitude is that of the whole public. The one aim common to every visitor is that of appreciative acquaintance (with the objects shown).

The scientific attitude is that of students of history. Their aim is *information* (about the object shown).

The practical attitude is that of craftsmen (comprising artists, artisans, and art students). Their aim is *guidance* (by the objects shown).¹

The question of precedence among these purposes admits of but one answer. In a treasury of creative genius the creative aim is paramount. A museum of fine art should seek first the spread of that appreciative acquaintance which is the goal of fine art. Subject to this prior duty it should administer its possessions both for purposes of historical study and purposes of professional utility, both as scientific specimens and as technical aids. It is the people at large, whose contemplative attitude toward a work of fine art fulfils more or less adequately the creative aim of the artist, for whom a museum of fine art primarily exists. The archæologist and the craftsman, whose attitudes of investigation and emulation respond to no intention on the artist's part, have a secondary, although indefeasible, standing therein.

This aim of appreciative acquaintance is what a museum of fine art exists for. The raison d'être, or reason for the existence of anything, is its distinctive purpose; and this is also its paramount purpose. When a man sets his hand

¹ Two words of comment on these aims: Both historical and professional study may aid appreciative acquaintance, although neither is indispensable, still less suffices to ensure it. Both sharpen observation, but five teachers — the eyes, life, travel, the historic sense, and art itself — are more helpful than science; while skill, if it divert the mind from achievement to method, may even be a handicap. Again: no others than technical students take the utilitarian point of view independently; for the spiritual uses of works of art are realized through appreciative acquaintance with them, and their material uses are obsolete in the artificial environment of a museum, where the sword no longer defends, nor the cup refreshes.

to making anything, it is because nothing exists availably which exactly fulfils the purpose he has in mind. Were there such a thing, the work of his hand would have no raison d'être. But the thing he makes may subserve many other ends than that which is its raison d'être. These purposes which it meets in common with other things, must yield in any conflict on equal terms to its distinctive use, its raison d'être. Else we are preferring what can to what cannot be attained by other means, the less valuable to the more valuable.

It is therefore a misuse of language to speak of anything as existing secondarily for its subordinate ends. Nothing exists secondarily for anything. What it exists for, its raison d'être, its distinctive purpose, is by implication its primary purpose. Its secondary and shared purposes it accomplishes without existing for them.

ON THE DISTINCTIVE PURPOSE OF MUSEUMS OF ART 1

Capital stress has in recent years been laid upon the educational functions of public museums, collections of fine art either included without argument or excepted without clearly expressed conviction. The purpose of the following pages is to question the right, thus assumed in fact or in effect, to conceive and manage a public treasury of art as if primarily an agency of popular instruction. According to the Areopagitica, who kills a good book kills reason itself. No less the precious lifeblood of a master spirit, who kills good painting or good sculpture kills imagination itself; and neither truly lives where its designed artistic effect is held permanently subordinate to an adventitious educational end. To preserve and display masterpieces of art, while preferring to the imaginative purpose of the artist an ulterior aim with which the imagination has nothing to do, is to betray the cause of art instead of serving it. There is imposed upon museums of the fine arts by the nature of their contents an obligation paramount to the duty of public instruction incumbent on all museums, the obligation, namely, to promote public appreciation of certain visible and tangible creations through which the fancy of man has bidden his senses follow its flight.

The argument here offered in support of this thesis may thus be summarized. A fundamental distinction is drawn between the æsthetic, or intrinsic, and the practical, or borrowed, worth of things; and it is claimed that their

¹ Reprinted from the *Museums Journal*, Sheffield, England (vol. III, no. 7, January, 1904), and from *Communications to the Trustees of the Museum of Fine Arts*, Boston, vol. I (March, 1904).

artistic quality is a species of the former, and their educational value of the latter. Museums are defined as permanent exhibitions of objects gathered because possessing either artistic quality (museums of fine art) or educational value (museums of science or the useful arts). From these two propositions it follows apodictically that museums of art and museums of other kinds differ radically as institutions of æsthetic, or appreciative, and practical, or instructive aim respectively. Four ways in which fine art, while aiming at appreciation, may result in instruction, are then examined; and in closing, three reasons are given why its educational by-product should in many minds overshadow its proper artistic yield.

It is here sought, in a word, to establish a conception of the essential functions of public museums which shall duly recognize the fundamental distinction between art and science—the purpose to present and the purpose to inform; between concrete and abstract, imagination and reason.

Anything we have to do with may either be to us or bring to us a valuable experience; may have worth either by its nature or its issue. We plant flowers for their own sake; grain for a harvest. In the first case a thing has value in itself; it is an end. In the second case it has value through other things, to which it is the means. In speaking of things perceived by the senses, we may, by interpreting the two words æsthetic and practical according to their etymological meaning ($ai\sigma\theta \dot{a}vo\mu a\iota$, to perceive by the senses, and $\pi\rho a\sigma\sigma\omega$, to bring about) call the former æsthetic, the latter practical value. An æsthetic object, in this sense, is one which needs, to justify its existence, only adequate apprehension; a practical thing is one which approves itself through some valuable outcome.

Of the two fundamental forms of value, a work of fine art may have both; but the one casually, the other es-

sentially. The distinction between fine and useful art rests upon the possession by the former of æsthetic qualities; that is, qualities which give a thing worth simply as an object for our perceptive faculties. The value of a work of fine art as end and not as means, its immediate, underivative worth as mere incorporate vision, pure object of contemplation, is that by which it came to be, that to seize and perpetuate which its maker created it. To be seen in its perfection is the whole of what a work of art as a work of art was made for. It was brought forth to transfer a certain perceptive and emotional content, often more than is consciously apprehended by the maker, to the soul of a beholder through his senses. The constitutive aim of every work of fine art, beyond which as an art-work it has none, is worthily to occupy the powers of apprehension; to bring before other eyes, to transplant into other minds and hearts what was, before the work existed, the passionate secret of the creative faculties of a single man of talent. The ultimate end of every art work is to be beheld and felt as it was wrought, and this end it fulfils whenever any one stands before it and perceives in it the artistic content it was made to convey, enters into the soul of the artist through the gateway of his work. Creation and appreciation, formation in one spirit and reconstruction in another, are the two poles between which lies the whole sphere of art. The whole life history of an art work is summed up in its birth in the imagination of an artist, and its rebirth through the senses of a beholder. Art is of the nature of an open communication, not of abstract notions but of concrete fancies, from the artist to all others whom it may concern. When an art work has said its say, its mission as an art work is accomplished, save as it forever repeats the same message. However many and important the external ends it may subserve, it was brought forth for none of them, but to mirror itself in new minds endlessly. The spread of a friendship with itself is its aim; the useful results of that friendship, however worthy they may be, form no part of its essential purpose. Fine art responds to the needs, not of our active existence, but of the contemplative life.

Any collection of objects permanently preserved for the observation of spectators forms a museum. Objects may be collected and exhibited either on account of their æsthetic or their practical value. A collection restricted to works of art is one in which the criterion of selection is æsthetic quality, higher or lower. Any object that has none is not a work of art. In a collection of scientific specimens or technical appliances it is a practical quality that is the basis of choice. Unless an object possess some instructive value it has no place in a museum of science or industry. The fundamental distinction between these two principles of selection defines two radically different types of the permanent public exhibitions we call museums. The limiting purpose of the one is æsthetic, and in particular artistic; that of the other practical, and in particular didactic. An art museum is a selection of objects adapted to impress; a scientific or technical museum is a selection of objects adapted to instruct.

By no liberality in the definition of the word education can we reduce these two purposes, the artistic and the didactic, to one. They are mutually exclusive in scope, as they are distinct in value.

They are mutually exclusive in scope; for education, according to received usage, is "the imparting of knowledge or skill"; in other words, the inculcation of habits of thought or action; or, still more briefly, the moulding of personality. The term refers to the spiritual or bodily effect of a course of experience, be its nature what it may. It means that a certain chosen character is impressed upon

us; that we are approximated to an ideal of personality, shaped to a model, formed as in a mould. Artistic comprehension, on the other hand, is the pure use of the perceptive faculties upon an object of human creation; it is the seeing of a thing as its maker saw it, in a measure it may be unknown to himself. The term refers to the nature of our experiences, be their effect upon us what it may. It means that the mind rests in its object, simply and fully beholding it, without deserting it for any other interest whatever. The nature of anything and the effect of anything being two wholly different matters, the two aims, that of artistic comprehension and that of instruction, exclude one another. The former seeks to give us experiences of a certain kind; the latter to give us experiences having a certain result. The æsthetic purpose, the aim of art, is to engage the powers; the didactic purpose, the aim of education, is to modify them. Where the sphere of education begins, the sphere of art ends.

Again, the exercise of artistic comprehension has a value wholly distinct from any educational worth it may possess. It is the contemplation of an object worthy to be contemplated; the seeing of it as its maker saw it when he found it good. An artistic thing has value for perceptive purposes pure and simple, independently of any others, whether instructive or not. Its worth differs from that of an instructive object in that it is immediate instead of prospective. The educative worth of our experiences is hypothetical, being dependent on a future exercise of the powers they shape; their æsthetic value is actual and not hypothetical, being that of the present exercise of the powers they employ. Art is an end, education a means to an end. The office of an art museum is one which is warranted in itself; that of an educational museum is one whose fruits are its warrant.

Thus neither in scope nor in value is the purpose of an art museum a pedagogic one. An institution devoted to the preservation and exhibition of works of the fine arts is not an educational institution, either in essence or in its claims to consideration. While museums of science or of useful art are a part of our educational system, institutions auxiliary to our schools, our colleges and our universities, aiming at the diffusion of information about the sciences and arts to which they relate, museums of fine art are a part of our artistic life, serving the cause, not of any utility, pedagogic or other, but of art itself. They are institutions auxiliary to that public display of creative genius in the construction and adornment of public buildings and other monuments, which is the first duty of living art to the place of its birth. In their chief function, it is theirs to gather up the art of the past, whose public no longer exists, and offer hospitality to the art of foreign lands, whose public is another than ours. They are instrumentalities by which civilization provides that neither shall antique art be lost, nor exotic art be non-existent to us. The distinctive purpose of an art museum may be precisely defined as the aim to bring about that perfect contemplation of the works of art it preserves which is implied in their production and forms their consummation.

But while this æsthetic office, proper to a collection of works of fine art, is fundamentally different from the didactic function for which other museums exist, there are still three ways in which the former attains or may be applied to pedagogical ends, as well as a fourth in which it can aid its own artistic aims by educational means.

In the first place, the appreciation of art is itself an educational influence. It should be noted that this is not because, like all other experiences of life, those of an æsthetic kind must be supposed to leave the personality in some

degree other than they found it. Experience is not on this account didactic. To be didactic it must not simply alter the personality, it must shape it to some model. Apart from the belief that life is all a school, a peasant is not as fully educated as a prince, although the former is subjected to a whole lifetime of trace-leaving experiences, and the latter to no more. For many more ideals, many more shaping purposes, have worked through the experiences of the prince than through those of the peasant. Likewise art is educative only in so far as there exist ideals of personality which work upon us through its creations. But since they are the product of the happier moods of more gifted people, it is fair to assume that in their assimilation we shall tend to be made over in the likeness of what is best in human endowment. In this view of art it is one of the ways in which the good word is passed among the children of men. It is one of the means by which the more fortunate few can permanently impress upon the less fortunate many some of their own excellencies. It is one of the ways in which character teaches by example. Artistic insight is a form of the inter-action of personality to which moral feeling offers the complement; since by appreciation we enter into the joy of another, as by sympathy into his pain. In art, the material of man's experience is re-wrought nearer to his heart's desire. It is a new world, of preferences, satisfactions, and ideals, set beside the old indifferent or sorrowful reality. From its contemplation we come as from a respite, strengthened for that from which it has brought relief; and endowed, moreover, with new patterns in the mind to which to approximate the life. The paradise of artistic creation is not hung in the heavens like an Olympus detached from earth, whose divinities have no thought for human kind. It has its consoling and inspiring outlook also, upon every-day reality.

True. But while artistic appreciation may thus be formative in effect, it is not to be overlooked that artistic creation is nevertheless not formative in aim. For art has a functional, not an organic purpose. Its object is not mediate, but direct. It aims at a use of the powers, and not at their development. It seeks not to prepare us for life, but to make us live. While didactic results flow abundantly from æsthetic purposes, they are a thing apart from those purposes, not an element in them. To seek instruction from works of art is not to accept them as æsthetic products, but to defeat their artistic aim in the measure in which our minds are divided between what they are and what we can gain from them. The value to which they owe their being is their own proper value as episodes in a life in the ideal. The artistic impulse is not one which seeks to apply the salutary, but one which aims to embody the perfect; and it is in the completest fulfilment of this aim, if we may so far vary a dictum of high authority, that art comes to move among ideas of noble and profound applicability to life.

In the second and third places, works of art have a function both in the promotion of historical learning and the development of technical skill. They are facts and bases of inference in the study of man and his past; and their scrutiny and imitation are means of instruction to those who are seeking command of the like instruments of æsthetic expression. To students both of the humanities and the practice of art, the study of works of art is an indispensable aid.

True. But while it is both possible and desirable to apply the contents of an art museum to educational ends, and while it may often be that a given art work has more instructive than artistic value, it is not its instructive value that makes of an object a work of art. Thus to use art works is again not to use them as they were created to be used, but for another than their native purpose. Not the investigator, not the craftsman, but the beholder — the sight-seer, in the strict and full acceptation of that word — is he for whose benefit art in its totality exists. To be appreciated is its whole end and aim, the fruition of all artistic effort; and neither the moulding of character, the furtherance of historical knowledge, nor the advancement of technical skill. As a work of the art of poetry, the Divina Commedia was not written to promote the interests either of religion, or scholarship, or literature, but to endow the world with immortal visions. As a pedagogical appliance, an exercise in Latin prose composition is not devised to fill the mind and heart with its message, but to be studied and manipulated grammatically and rhetorically. To peruse the exercise as a romance of Caius and Balbus, or to parse and critically and philosophically analyze the Commedia, is to use neither in the way it was meant to be used; and the like principle holds of material creations. While in a museum of science or of industry the student and not the sight-seer is the personage of first importance, in an exhibition of fine art the scholar of whatever name, indefeasible as his rights are, must in the last analysis yield precedence to the visitor pure and simple.

In the fourth place, an art museum can, and as a matter of fact must, to fulfil its own proper purpose as a treasure-house of the art of bygone times and far-off peoples, perform a special educational work. While it is far from being able to do all that is necessary to enable its visitors to take the point of view of other civilizations, it can still do much to this end, and what it can do it should do. It is true that the capacity to comprehend works of art is in no small degree a matter of native endowment. Yet in its

measure it both needs and admits of aid. The right kind of instruction will almost always augment the power of a given person to see what the maker of a given work meant by it; although no amount of training will enable some persons to see what others can see without training at all. Without overestimating the degree in which the information of the public will render it more accessible to an artistic message, the principle is evident that a liberal use of educational means is indispensable to the proper æsthetic purpose of any collection of artistic objects, and is therefore to be included among its duties.

True. But it is not to be overlooked that this conclusion gives to any didactic machinery but an auxiliary place in such a collection. The label, the catalogue description, the spoken interpretation of a museum object are not the superiors of the work they refer to; they are its servitors, whose whole function is accomplished when they usher the visitor into a royal presence. It is to the permanent display of things existing by the divine right of their immediate and inherent worth that a museum of art is devoted; and under its auspices the aim of instruction remains essentially subordinate to that of æsthetic comprehension. In so far as the frequenters of an art museum are in this fourth way its pupils, it is to the ultimate end of becoming better visitors therein.

The conclusions of this discussion may be summed up in the statement that while museums of other kinds are at bottom educational institutions, a museum of fine art is not didactic but æsthetic in primary purpose, although formative in its influence, and both admitting of and profiting by a secondary pedagogical use. The true conception of an art museum is not that of an educational institution having art for its teaching material, but that of an artistic institution with educational uses and demands, This thoroughgoing distinction between the two kinds of museums, artistic and educational, a distinction based on the two types of value, æsthetic and practical, characteristic of their contents respectively, is apt, in Anglo-Saxon countries at least, to pass unrecognized. We are apt to think and to speak of all museums indiscriminately as educational in their controlling purpose; a fundamental error which may be ascribed to at least three causes:

First: To the manifest importance of the educational uses and demands of public exhibitions of fine art.

Beyond question, the friendship of fine art is in the noblest sense a liberal training; undoubtedly, works of the art of the past are object lessons in antiquity, and masterpieces models for the formation of style. Yet to conceive of fine art as model, or lesson, or training is not only to ignore its essential nature, but to contribute to the perpetuation of that ignorance. For under this misapprehension, effort after an acquaintance with art, though it may be active in formative years, when the content of art works cannot be fully grasped, will be apt to relax in the period of maturity to which alone art is addressed. Early familiarity with fine art is never its comprehension; that which is the expression of vigorous intelligences in the fulness of their powers can be understood only by minds of corresponding development aided by an experience equally ripe. What art really is, what exhibitions of art are really for, can be but imperfectly realized where the study of art works is left to adolescents and regarded as an occupation for immature years.

On the other hand, through the realization of this very truth, the importance of an adequate preparation for the comprehension of fine art may come to overshadow in our minds that of the comprehension itself for which it exists. No less evident than the educational use of art is the imperative demand for some interpretation of art works, especially those antique or exotic in origin, in order to make them tell upon the public. Originally gathered for private pleasure, it is only since the eighteenth century that collections of fine art have developed into the foundations for public benefit we know as museums; and it is very much more recently that the old habitudes of their management for the advantage of the expert have given place (as in the case of public libraries) to the serious study of how best they may be utilized for the people generally. To this new end all possible means of public information are an evident essential, since, unless by rare exception, it is only those in whom native taste has been reinforced by more or less instruction who can hope even approximately to realize in themselves what the art works of far-off lands and bygone times have been to the race from which they sprang. In our zeal for such instruction we forget and perhaps deny that this realization is its final warrant in a museum of art.

Second: The immensely increased dependence of civilized nations upon communication by reading and writing has in modern times acted to weaken their powers of specifically artistic comprehension. Art in itself is apt to interest the educated of the present day less than learning about it; and hence the promotion of the latter easily appears the more valuable end of the exhibition of art works. For in truth, painting, sculpture, architecture, and their derivatives, speak only to those not bound to the abstract content of the conventional symbols of language, but free to feed their minds upon concrete objects of sense. In science, the history of instruction during the past generation has been a sharp struggle to overthrow the dominance of book learning in the curriculum, to substitute the methods of the laboratory for the reliance of our foregoers

upon the printed page. In matters of art, likewise, the instinct of the modern literate public has been to believe that what cannot be written in a book, or told in a talk, either does not exist or need not be seriously considered. Hence a tendency to rate the scientific investigation or literary interpretation of art as at least the sufficient surrogate of appreciation, if not its higher end; hence a blindness to that really unspeakable element in works of fine art which constitutes their core and essence, which is all that led their makers to take up the brush and the chisel rather than the pen. For the full public realization of the specific province of art, there is still demanded a movement away from books on art, and toward the facts of art like that just accomplished in science.

Third: Most of those who begin to theorize upon fine art at all, especially among our own race, tend to regard it as didactic rather than æsthetic, both in nature and in value; nor is it difficult to give reasons for the fact. Ours is preëminently a practical time and practical race. We are not inclined to rest in anything; we tend to judge things wholly by their outcome. The good which a thing possesses in itself, its æsthetic quality, its actual value, is habitually, by the twentieth century, the Anglo-Saxon consciousness, subordinated to the good it promises, its practical importance, its possible value, in knowledge, skill, personal consideration, money or whatever else of worth it may bring. "Qu'est ce que cela prouve?" said even the French mathematician, after reading Racine's "Iphigénie"; like Leigh Hunt's

"Crabbed Scot that once upon a time Asked what a poem proved, and just had wit To prove himself a fool by asking it." ²

² Alter et Idem.

¹ The story is quoted by Schopenhauer, Wille und Vorstellung, book III.

"Except in so far as it is formative or directive, of what good can art possibly be?" we ask; all alike judgments by their extrinsic value, of things created for their intrinsic worth. But the difficulty with the æsthetic view of art has a deeper source than this, in a widely human indisposition to pure contemplation. "Man never is, but always to be blest"; or as Pascal wrote a century before Pope, "This world is so full of disquietude that we almost never dwell upon our actual existence, upon the moment in which we are now living, but upon that in which we are going to live; so that we are forever preparing for life in the future, but are never ready to live now." Art aims to offer us, even here on this unsatisfactory earth, sights that are really satisfying, moments that we would wish to delay, things that are worthy for the mind to rest in; but the imperative necessities of practical life have so ingrained within us habitudes of thinking and striving for the morrow, that the best of us are often unable to accept the gift.

¹ Pensées, part II, XVII, 29.

THE DIDACTIC BIAS IN MUSEUM MANAGEMENT

What Jeremy Bentham called "question-begging epithets" not only mean but demean what they signify. "Bias" applied to states of mind is such an epithet. It denotes one-sidedness where one-sidedness is out of place; that is, in the judgment. In the cut of clothing bias may be quite in place. The use of the term in the title of an essay announces condemnatory writing — that humbler but sometimes useful type of literature to which polemics and philippics belong.

By the didactic bias is here meant the belief that the value of everything and in particular the value of fine art, is chiefly its instructive value. Let us first escape Bentham's criticism by seeking to prove this belief, in the case of fine art, a one-sidedness of judgment; and then point out its untoward influence upon museum management.

The educational theory of the value of fine art is the outcome of two deep-seated and allied spiritual faults, one organic, one functional. The organic fault is an undue preponderance of the active over the affective nature; the functional fault an ascription to means of the honor due ends.

1. The organic fault is the defect of a quality in the English-speaking peoples. Atrophy of perception and hypertrophy of reaction produce in the Anglo-Saxon spirit a comparative aversion to pleasure and absorption in effort. This trait gives its point to Heine's taunt that in old England "the machines behave like men, and men like machines," and to Lowell's that in New England we

¹ L. Börne, book II.

"Kerry a holiday ef we set out Ez stiddily ez though 't was a redoubt." 1

Confronted by an object which, like a work of art, has a double appeal, may be taken either as a source of delight or stimulus to curiosity, most of us instinctively choose the active alternative. Over-familiar with enjoyment in the shallow and ill-regulated forms open to undeveloped affective natures, we are too apt to fill our laborious days with an ignorant scorn of delights accessible to others. Fine Art is the precipitate of happy moments, and in this its essential nature we as hustlers — on the way but mostly ignorant of where we are going — tend to despise it as a weak affair, a matter for women, children, and emasculate men, reserving our approval for its accidental rôle as meat for school drill and the investigator's toil.

This is a good efferent belief, felt from our marrow, no less strong because seldom articulate. We have an ancestral contempt for artists and connoisseurs, as for any man who sings, overflows in baying at the moon or elsewhither. Ruddy and healthy as it is, the fruit, with a clear skin and shining eyes, of active digestion and dreamless sleep, this belief is, alas, also stupid. The sentiment that it is only as a matter of learned discipline that fine art has serious value, and that public interest in art as an object of enjoyment simply is an essentially light and trifling affair, rests first on a false antithesis between the serious and the pleasant. and second on a false synthesis between knowledge and the serious. Pleasure is not something essentially trivial; nor is knowledge something essentially important. The more vivid and overwhelming pleasure becomes the more absolutely serious a thing it is; while there is nothing more frivolous than the didactic trifler known as the pedant.

Delusion the first springs from an identification of the

¹ Biglow Papers, no. vi: "Sunthin' in the Pastoral Line."

enjoyable with the comic. "Three hours of laughter" is on American theatre-posters synonymous with an evening of enjoyment. Serious and comic being opposites, the serious becomes, to the naïve intelligence, equivalent to the joyless. The truth, which the naïve intelligence does not suspect, is that the pleasure a work of art can give is too intense and too voluminous not to be serious. Poe writes of "Days when mirth was a word unknown, so solemnly deep-toned was happiness."

Delusion the second evidences, by its overestimate of the importance of knowledge, the American lack of it. "Omne ignotum pro magnifico." Compare the infectious awe which a book and he who can read it inspires among Ariosto's athletes with the scant reverence which modern literati pay printed matter.² Not all inquiry is important for every one, and in particular historical inquiry into art, apart from the aid it may give in the enjoyment of art works, has no serious importance except for specialists. Intrinsically the history of art has no more claim upon the attention of the intelligent public than has the history of religion or of science, or of government, or of any other special element of civilization. By itself considered it is one of the least of human concerns. But the commerce of art works is one of the greatest. The knowledge of art history bears much the same relation of importance to the friendship of art itself that a knowledge of the Diophantine Analysis has to the ability to cipher correctly, or the perusal of Lecky has to keeping one's word to one's neighbor and one's hands off his property.

¹ Colloquy of Monos and Una.

² Orlando Furioso, IV, 17; also XV, 19:

[&]quot;... un libro, onde facea Nascer, leggendo, l'alta maraviglia."

[&]quot;A book out of which, in reading, He made deep marvels come."

2. The functional fault expressed in the didactic bias is a common human failing. Absorption in means to the neglect of ends has been a matter for moralists in all ages. "Et propter vitam, vivendi perdere causas." People do not like to think about ends at all. The very idea of an "end in itself" is caviare to the general public. Even the syllable "end" has a hollow, tomb-like resonance. "Man always wants a something beyond," as George Eliot remarks. We cannot rest without an eye to the future. Shake-speare's

"Trip no further, pretty sweeting, Journeys end in lovers' meeting,"

fails with most of us to awaken a responsive chord. This looking for the future is ingrained into Christian civilization, although we may believe the mood to have been alien to the Greek mind, and although the Gospel petition is plain: "Thy Kingdom come on earth."

Hence it arises, very naturally, however unreasonably, that our highest praise for anything is the epithet "educational." By this even careful speakers often mean only that the thing talked of is a good thing, an element of model living, something that we include in our ideal of human condition. But the habit of speech is bad. "Educational" has a definite meaning, namely "formative"; and it darkens counsel to use it as a mere vocable of benediction, a simple synonym for "good." The case is clear against the practice. If a preparatory thing and a good thing are synonymous, it results that the thing prepared for is worth nothing. But the preparation for a worthless thing is itself not worth while; and thus we find ourselves damning what we have just blessed. This is a pitiable condition for thinking beings. Why long for the morning if we fear to see it break? Only in a mental fog does educa-

¹ Juvenal, Sat., viii.

tion or betterment in general seem the controlling interest in life. The controlling interest in life is happiness for one's self and for others. Pleasure and virtue are the goal, knowledge the guide. As Poe wrote in his "Letter to Mr. B.": "... it is a truism that the end of our existence is happiness: ... Therefore the end of instruction should be

happiness; ... Therefore the end of instruction should be happiness; and happiness is another name for pleasure; ... and pleasure is the end already obtained which instruction is merely the means of obtaining."

While, therefore, this educational enthusiasm is comprehensible, to wit, as the tribute of the Present to the Future, it is of deformative and stultifying tendency unless firmly controlled, and gives occasion for a note of warning. Unless the Future is some day and for some one to become the Present, the less we think of it the better. That this note should be raised from Boston seems wholly appropriate. If teaching is the power for human enlightenment we all believe it, a didactic metropolis should be the first to waken from the intoxication of the worship of education as an end and give it the sober regard befitting its status as means.

In the concerns of a museum of fine art the overemphasis of education, and in particular of instruction, may be deprecated both on *a priori* and *a posteriori* grounds.

1. A priori: because either an absurdity of logic or derogatory to art.

It is irrational because in restricting the collection of a museum to objects of fine art the principle of exclusion is in contradiction with the assumed educational purpose. The regulative principle of an institution should be consistent with its constitutive principle. Other things than works of art would contribute to education whether moral, historic, or technical; and in shutting them out that purpose is implicitly denied. The wear of Michel Angelo's chisel or

that of a volume from his library might throw a ray of light on his art shed by no work of his; and the tool or the book could not consistently be excluded from any museum whose purpose was primarily educational. Yet a museum of fine art would exclude it, and hence though it said Yes to the didactic theory would still do No, which is absurd.

By no means, it will be answered; correctly expressed, the purpose of collecting and exhibiting the best attainable works of genius and skill is to educate through art, which is itself educational in essential nature. This assertion is lèse majesté. The essential nature of fine art is not educational but fruitional, not formative but creative. Art is the Gracious Message pure and simple, without arrière pensée, the Santa Conversazione of iconography. This latter — a sympathetic entrance into gifted minds by the contemplation of material products through which these minds have spoken — is one of the ends of existence. Education is one of its means. In simplest terms, education — the moulding of thought, word and deed — is preparation for the perfect life; but art — the marriage of creation and appreciation — is integral to the perfect life. In the mouths of those responsible for an art museum, a didactic theory of its purposes is worse than a slight; it is a betrayal; for thereby the guardians of a diamond maintain before the world that it is really a pebble.

2. A posteriori.

The interests of enjoyment and instruction in an art museum may openly conflict. The accumulation, by a museum, of objects historically or technically interesting (e.g., reproductions) may prevent acquisitions of artistic quality; and the powers of a staff may be so engaged in the initiation of the few into the science of their subject as to unfit them from representing its religion to the many. An arrangement of exhibits which will save the comparative

student most steps and distraction of mind may be inharmonious and wearisome to the seeker after a comprehension of the works installed. The use of galleries for viva voce instruction may become a disturbance of the public peace for him who would give ear to the silent voices therein. A monopoly of the space before great works of art by copyists may become a museum abuse. These and many other possible conflicts call for a settlement between the point of view of the masters who have wrought on canvas and in stone that we might enter into their labors; and that of those their servants who hold the theory of the essentially educational purpose of collections of their achievements.

But such a theory cannot, as argued a priori, be maintained at all; both because a collection of works of fine art exists by hypothesis for fine art and because in so doing it fulfils a purpose outranking education.

CONNOISSEUR AND DILETTANTE: A MEDITATION ON SKIMMING SUGAR WITH A WARMING-PAN

TIMOTHY DEXTER was a singular character of Revolutionary times in New England who, having become suddenly rich, assumed the title of "Lord" and built in Newburyport a stately mansion, adorning the grounds with statues of himself among those of great men and mythological beings. He is remembered for many other conspicuous whims, chief among them the despatch to the West Indies of an invoice of warming-pans, which he sold there at a profit for sugar-skimmers, when for their original purpose they proved a drug in a tropical market. The story is told from the point of view of the trader as an instance of push and resource triumphant over incorrigible oddity. It may also serve, from the point of view of the purchaser. as an instance of the successful diversion of a work of man's hand to a purpose wholly other than that for which it was made. It becomes thus a parable of the frequent fate of objects of fine art of every kind, from pictures to poetry. For a West Indian of Lord Timothy Dexter's time. deciding upon the best use of certain newly imported hardware, could not have disregarded the true nature of that famous invoice more completely than many of the most sensible people at all times, dominated either by their emotions or their thirst for knowledge, ignore the true nature of a work of art. "How convenient the long handle at the sugaring-off!" we can fancy the planter saying; "How neat the receptacle, and easily cleaned!" "What a piquant taste it gives the product!" And yet Lord Timothy Dexter's ventures were made, not to skim sugar, but to warm

beds; as works of fine art are made, not to skim the sweets of emotion or knowledge, but to warm the couch of fancy at the fires of genius. This truth the dilettante overlooks, and the connoisseur recognizes.

Etymologically, a connoisseur is one who knows fine art; a dilettante one who delights in it. But connoisseurship implies taste. Hence a connoisseur is one who delights in it too. Evidently etymology throws us off the track; the distinction must lie between enjoyment enlightened and enjoyment unenlightened. There are two ways of enjoying a work of art. One may enjoy the artist in it; or one's self over it. The connoisseur enjoys the artist, the dilettante himself.

What is it to enjoy an artist in his work? It is to gain from the work just the particular kind of spiritual harvest that it yielded him. It is to see it with his eyes or hear it with his ears, to grasp it with his mind, to feel it with his heart. It is to make it mean to us what it meant to him. This is to apply the work to the artist's own purpose in creating it. His artistic intention becomes our own.

What is it to enjoy ourselves over a work of art? It is to gain from it another than the spiritual harvest it yielded its maker. It is to see or hear in it what he did not put there, to contemplate it with other thoughts and other feelings than his. It is to make it mean to us what it never meant to him. This is to apply the work to purposes of our own choice in contemplating it. Our own non-artistic intention supplants that of its maker.

This *mis*- or *ab*-use of an artistic object is possible in three ways; and there are accordingly three varieties of dilettanteism. We may allow a work of art to waken in us any feeling it will, without any effort to read it as a message from another soul. We may seek in it only our own interests, without penetrating by its means into the artist's

interests. This is emotional dilettanteism. Or, we may make an artist's work serve our thirst for theoretical or practical knowledge. Instead of trying to assimilate the work itself, we may strive to learn about it. Our aim may be, not to perceive it, not to take it in as the artist intended, but to make the work and its methods the subject of investigation, as the artist never intended. This is intellectual dilettanteism, in its two forms, scientific and technical.

Despite the aroma of disesteem — even of disgust — that clings in our latitude and time about the word sentiment, emotional dilettanteism may be quite as respectable a form of egotism as its intellectual fellows. All three are a practical denial of the artist's right to exist for his own purposes. All three are selfish in the presence of an opportunity for unselfishness. But even a *mis*-use in the strict sense may not be wholly an *ab*-use in the bad sense, as Lord Timothy Dexter's West Indians proved.

Emotional dilettanteism in its commonest form is the love of money in disguise. Le Raphael d'un Million was the title given by Parisians a generation ago to an altar-piece since sold at a much higher price in America: "The million-franc Raphael." Even in France, the nation of culture, popular interest in the picture was largely fed from its glamour of cost. Yet what had Raphael to do with a million francs? Did he aim to communicate to us in the canvas the pay that he got for it? All the emotions of cupidity that have since swarmed about the painting were feelings totally foreign to the mass of line and light and color that he wrought to carry its high religious meaning. In our own beloved land, bent upon making a magnificent living, the glamour of cost is still greater. Where political authority is equal and social privilege forbidden, money is the sole power with a leverage on every one; and the dollar becomes — at least for rhetorical purposes — almighty.

Ours is the country of five thousand dollar banquets, million dollar hotels, ten million dollar babies; and nothing so recommends to us a work of art as an exceptional price. Commercial dilettanteism is to many an idle spectator his only avenue of access to fine art. We buy best sellers, we throng prize plays, we crowd before the Rembrandt that cost a king's ransom.

In the collector himself, emotional dilettanteism takes other forms. Dr. La Caze, true beholder of the works of art he gathered to bequeath to the French people, divided collectors into three species. The first collects things in order to have them; the second in order that others shall not have them; the third in order to enjoy them. The first is dominated by the emotion of possession. His gallery hospitality is the "tour du proprio"—the excursion of the proud possessor. The taste of the second consists, as has been wittily said, in an unerring instinct for that which others will want when they see it in his possession. Of this emotional frame many a famous collection of fine art was born, and by it is increased. The pride of exclusive ownership explains numbered copies, destroyed plates — purely non-artistic devices, and as far from the heaven of the imagination as earth can well descend. To this envious preoccupation the word "dilettante" owes no little of its unenviable flavor. The third species embraces the connoisseurs. These are they who collect in order to think over again the happy thoughts of which their possessions were born.

Emotional dilettanteism in a much higher form is accustomed to make of fine art a running accompaniment to the habitual current of the thoughts. For the amateur in this sense ideal contemplation consists in fluctuations of attention as occasion offers between the fancies of others and his own reverie or his own affairs. Its rôle is that of a

series of momentary interludes in his preoccupation with his proper life — glances elsewhere, fragments of talk on other things. Such is the habit of the opera balconies. This is the tired-business-man theory of artistic appreciation. It assumes that what the mind can take in when supine and distraught is the real meat in works of fancy. Flaccid and disjointed apprehension is that which best assimilates artistic beauty. Yet there was one person — namely, the artist — whose attention to the work of his hand was neither supine nor distraught, flaccid nor disjointed. Can recumbent and interrupted beholding win from it what it won from him? Verily not. The tired business man must submit to learn that his is but an outside view of what he beholds, that immense penetralia await another mental attitude, incompatible alike with somnolence and with distraction. "M. Mozart," said the Emperor after the opera, "there are a great many notes in your piece." "Not one too many," replied Mozart. This vital fact had passed quite unperceived by the imperial ignoramus as by his court of tired business men.

The highest type of emotional dilettanteism blends insensibly into connoisseurship. We can easily imagine Carl Maria von Weber looking down with indulgence upon the gray-haired doctor of law whose self-imposed duty it has always been to hear "Der Freischuetz" whenever it is given, in pious memory of the happy times—"Die waren glückliche Zeiten"—when an Agathe of long ago was the heroine of his own romance. For "Der Freischuetz," too, is a story of love, and the passions which warm the old veins are essential elements in the effects the composer sought. Punch's matron, remarking before the Venus of Melos, "Lawk! it's hexact like hour Hemma!" was plainly, by the happy fortune of her close relationship to Hemma, no total stranger to the artist's ideal. William James's

good old couple in ecstasies over the expressions of humility, of passionate faith, of ineffable adoration, in the faces of some of Titian's figures, although, as Dr. James intimates, their talk would have made Titian's blood run cold, yet found in the picture psychic data which might have lain within the artist's intention. Indeed, they properly form a part of the artistic content of an altar-piece. We make no mistake in looking upon Giotto's frescoes in the Lower Church at Assisi with the eyes of Christian faith. The sacred poem we love for the lips that once uttered, or the occasion that once hallowed it, was made for such lips and such occasions, and we do not wander far from it in remembering them.

Intellectual dilettanteism of both kinds is divided from connoisseurship by a sharper line, but in the technical form has also its bond of connection with the artist. The line is sharp because it is the line that separates perceiving a work of art from reflecting upon it, the thing itself from our thoughts about it, the question What? from the questions How? and Why? The connection exists because the technical dilettante applies the questions How? and Why? to the artist at work.

The scientific dilettante, if a historian of art, seeks to date the work before him, to trace the influences it betrays or has exercised; if a historian of civilization, to reconstitute by its aid the habits of thought, the ways of living, the persons and events of its time and place; if a theorist, to establish the principles that govern the artistic impulse. The technical dilettante studies the artist's methods as the work reveals them. But what part of all these ambitions entered the artist's mind as he worked and became the purpose of his painting, his carving, his music, his verse? Not an atom. The artist wrought in order to share with us a certain complex of sensation, thought and

feeling; and its date, its causes and effects, its implications and significance are not his work but ours. If we are connoisseurs, we share in what the artist offers, we do not add thereto.

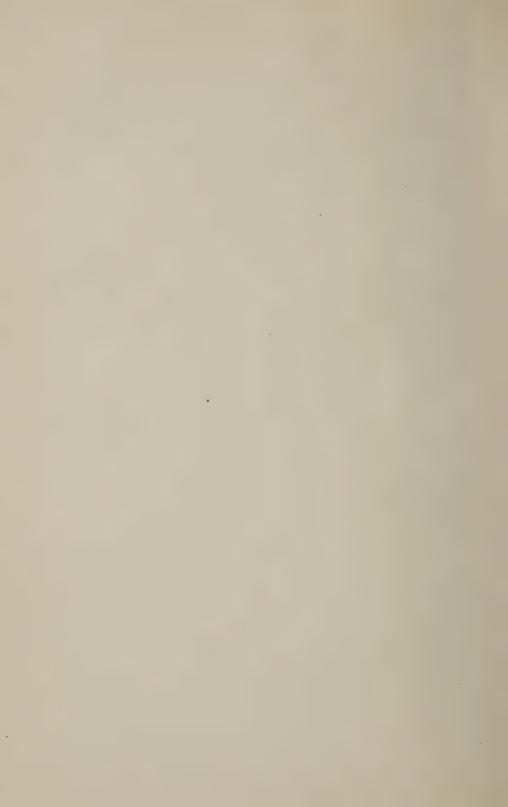
Thus each of the three kinds of dilettante, emotional, scientific, and technical, has his own way — and a way not to be despised — of ignoring the true nature of what he delights in. The emotional dilettante, who "knows what he likes," though he "knows nothing about art," all unknowingly fulfils in minor, or perhaps major, degree the artist's purpose in the object of his liking. He has the root of the matter in him; for the root of the matter is joy — though it be the tragic joy of a morning such as breaks for Achilles' death over the Ægean in Regnault's Automedon. The scientific dilettante, although his purpose and achievement lie wholly outside the purpose and achievement of the artist, yet by the way and even in the end may have to do with the proper content of what he studies. "To the student of art the most precious result of his labor is the full pure enjoyment of the work of art."1 So the archæologist Furtwängler wrote, not forgetting that the way we may come by a thing is not the thing we come by. So our own Professor Gildersleeve confesses, "it is to the conviction that philology is not all science, it is to the quest of art through science, that I owe the joy of life in my vocation."2 Moreover, it is for no individual end that the historian or the esthetician transforms to a datum of inquiry the object of admiration a work of art was meant to be, but in the service of a science and therefore of the world. The technical dilettante, finally, enters the artist's mind as the emotional dilettante also may; yet not to share, if remotely, in his purpose, as the other

¹ Kunstsammlungen aus alter und neuer Zeit. (Munich, 1899.)

² Oscillations and Nutations of Philological Studies, Johns Hopkins University Circular. (April, 1901.)

does, but to study his methods; and, for the most part, against the artist's will. A picture was still incomplete in Whistler's eyes if it lent itself to like inquiries. "Industry in art is a necessity — not a virtue — and any evidence of the same in the production is a blemish."

The more honorable part in the service of fancy remains with the connoisseur. For the civil thing to do when a man speaks to us is to listen to what he says, and neither to let our wits go wool-gathering, discuss his lineage and breeding, nor criticise his rhetoric and delivery; as the sensible thing to do with a warming-pan is to use it neither in skimming sugar nor in any other process save the process of warming beds for which it was made.



PART II. METHOD

I. GROWTH

II. CONSTRUCTION

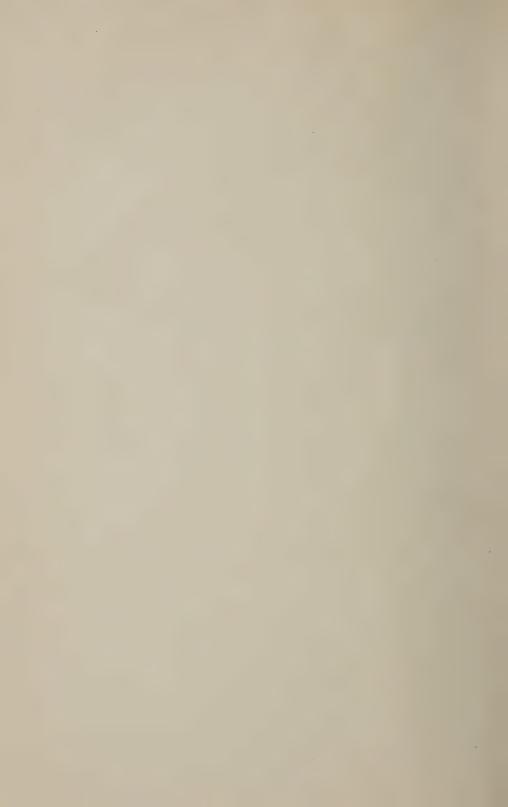
III. INSTALLATION

IV. EXEGESIS

V. GOVERNMENT



I GROWTH



GROWTH

ON COLLECTING FOR MUSEUMS

When we speak of "promoting the cause of fine art," just what do we mean? A cause is some state of affairs that somebody wants to bring about. Fine art consists of things created to be enjoyed — for the purposes of this book, tangible things, excluding music, literature and their allies. To promote the cause of fine art thus understood is to see to it that architecture, sculpture, painting, and their minor derivatives shall be abundantly and worthily created and widely and rightly enjoyed, or both.

People may combine to promote the cause of the tangible imagination in at least four ways. Artists may combine in guilds to help each other to recognition, or in schools to hand on their processes to the next generation. Amateurs in the best sense — those who love beautiful buildings, statues, pictures and the like — may combine either to make it possible for artists to create these things, as clubs, churches, cities and other bodies do; or to put those already created into a position to be enjoyed. Artists promote the cause of fine art collectively by Association and Instruction; amateurs, by Patronage and Exhibition.

Museums of fine art as we have hitherto known them are coöperative enterprises with the purpose last mentioned. They are one of two ways in which amateurs combine to get artists a hearing — or more exactly a seeing. Their way is to gather together in a special building the things they want to have seen. The other way is to make known the things in situ; and this is the way taken by the gov-

ernmental and private organizations, long established in the Old World, and just beginning in the New, which are devoted to inventorying artistic treasures within specified territory. Museums, on the contrary, are collections. They grow by bringing objects together in one place. The two methods notably differ in that architecture falls within the scope of inventories, and almost wholly outside the scope of collections. Buildings cannot in general be removed and set up together. Hence architecture contributes to the contents of museums chiefly in the form of sculptured ornament.

Collecting for museums consists in acquiring sculptures, elements of architecture, pictures, or objects of minor art, for the purpose of placing them on permanent show in a place apart. To be good collecting, the process of acquisition must serve and not disserve the cause of art. Unless it helps on either artistic enjoyment or artistic creation, it defeats its own ultimate purpose. What shall museums collect to meet these conditions?

As to artistic enjoyment. A question not to be avoided regarding any proposed museum acquisition is "Will the object be better off in a gallery? Will it be seen to better advantage, enjoy a longer lease of life, meet a more responsive public?"

Plainly, yes, in the case of objects brought from isolated or unsuspected places, the finds of explorers and excavators. So with objects in places grown obscure or dangerous, either no longer visible as they were meant to be, or doomed by smoke or dust or glare or frost or damp or fire or neglect or other source of decay. So with objects already exiled from the places they were made to occupy, bereft of the function they once fulfilled, liable to fall into weak or ignorant hands, like much of the stock in trade of the artistic market. But as plainly, no, in the case of objects still

safe where they were meant to be, still capable of fulfilling an intended function, still appealing to a public like that for which they were fashioned. To gather such things into collections is not to promote but hinder the cause of art. They give less artistic enjoyment in a gallery on two accounts. They become fragments, unsupported by the environment of place and event for which the artist reckoned them. They are cheek by jowl with other fragments, more or less alien. The museum affords an asylum for the flotsam and jetsam of art, its waifs and strays. It restores their threatened or suspended animation, but only by offering an institutional surrogate for normal life. From their niches in an Italian villa, the statues asked Mignon, "My poor child, what have they done to thee?" and the timeless beauty of every untouched work of art presses this question upon every beholder; but in a museum it is the beholder that is tempted to ask it of all he sees. The statue or relief once deepened the impressiveness of a temple now ruined or a tomb now buried, was a rallying point in a forgotten market-place, or the genius of a grove now felled. The bit of fresco, the historical canvas, the likeness of a noted man, was made to catch wandering eves in an assembly hall. The family portrait hallowed the walls of a home, the landscape or the genre picture brightened them, the cassone or the carven table saw them furnished and dismantled. The altar-piece guided the thoughts of far-away worshippers, the rug was their place of prayer. The tapestry helped to make sumptuous a palace now a memory. The coin passed from buyer to seller within a vanished body politic. The armor can no longer shine at any tournament, nor turn a hostile blow on any battlefield. The porcelain held flowers of the antipodes, toasts were drunk from the bowl, the urn has been emptied of beloved ashes, the vial of passionate tears. The miniature

hid between the leaves of books now scattered. The mirror framed the image of a fair face, the jewels flashed on beautiful shoulders. To gather up these fragments from the past is an imperative duty of artistic piety. When the New Zealander has finished sketching the ruins of St. Paul's from the broken arches of London Bridge, he may carry away Landseer's bronze lions to be the pride of a South Sea museum: but while the central roar of a metropolis still beats upon them, the cause of art is best advanced if they keep their watch about the foot of Nelson's column in Trafalgar Square.

As to artistic creation. What method of collecting for museums will help it? Obviously, direct purchases from artists. Acquisitions from the studio or the exhibition will nourish producers and the distinction of the sales will stimulate production. But to include this kind of collecting for museums, the definition just given of the type of institution to which they belong needs to be enlarged. They become one of the ways in which amateurs can combine to get things made, as well as to get them seen. A museum that buys from artists is not simply an exhibition place for our inheritance from the artistic patronage of a former day: it becomes a patron on its own account. This second rôle is at once new, and important.

It is new. Museums of fine art themselves are a comparatively new thing. The French Revolutionists may be said to have founded the first one when in 1793 they took possession, in the name of the people, of the collections of fine art in the royal palaces of France, and formed the nucleus of the Louvre. The museums founded in Europe during the generations immediately following were also the result of the nationalization of private cabinets, princely or royal. Museums of art were from the beginning the second abode of their contents, dedicated to the past and not to

the present. The greatest still remain wholly devoted to the cause of artistic enjoyment, not artistic creation. Perhaps the Crystal Palace of 1851 marks the date when works of fine art began to be bought from their makers for permanent public show. Museums of art in America owe their origin to this exhibition, and to our own world's fairs, to which it gave the impulse. With us the motive of artistic piety had not the compelling force it possessed in the Old World. Our short pioneer history had afforded the tangible imagination comparatively little scope: and our hardly interrupted prosperity had left much of its product still in the public places and private hands where it was intended to be. A share in the salvage of exotic art was open to our museums; and American public spirit has liberally provided the necessary money. But time is also necessary. Opportunities must offer, and the capacity to seize them ripen. Patronage, on the contrary, can be immediate; and patronage of home talent appeals to local pride. Hence our art museums have tended from the first to supplement their importations by works of art fresh from the maker's hand. They have ceased to be simply the asylum of creations of the material arts, and have become in a measure their intended home.

The new rôle is also important. It implies a radical change in the attitude toward the material arts hitherto maintained by artist and amateur alike. In all ages, workers with the brush, the chisel, the mould or the loom, have for the most part sought to beautify objects of use; and their patrons have demanded the continual companionship of their creations. In working with an eye to installation in a museum, artists aim to beautify nothing; and the occasional companionship of their work is all that amateurs obtain.

It can hardly be denied that in the event both creation

and enjoyment would suffer. The guidance and constraint of a non-artistic aim is by general admission a well-nigh indispensable condition of the highest achievement in any material art. If this is true, museum-made art is condemned in advance to inferiority. So the authorities agree. The artists cannot be depended on to do their best at it. Nor can amateurs get the most from it. Museum-made art accepts in advance the position of a recourse for hours of freedom, resigning that of the possible inspiration of any hour. A rudimentary knowledge of the human heart teaches that this position is inferior in quality as in quantity. One's moods may not coincide with one's leisure; and to make the most of them we must live amid the beauty which they crave. The inference is unequivocal. Should museums take up the patronage of art as a permanent function they would usurp a rôle that true fidelity to its cause demands should be left to the public. Museum patronage would tend eventually to lame the worker and disadvantage his work. In the long run the nourishment and stimulus it gives artists would not pay. The ideally best collecting for museums consists in acquiring from the user, not the maker. To be first-class, a collection of fine art must, unless by exception, be second-hand.1

¹ If we love art, we must rejoice in proportion as museums are unnecessary; and look upon its conservation therein as the Greeks looked upon existence in the underworld, all of whose years were not in their minds worth a single day of warm and breathing life.

In his Éléments et Théorie de l'Architecture (Paris, 1890, vol. 11, p. 316) Professor Guadet writes:

[&]quot;In all epochs really creative artistically, museums have been unknown: least of all would those times have comprehended an artist's producing a work for immediate interment in such a domain of death. Painting was then principally intended as architectural decoration and for public instruction, the spiritual elevation of the people. Every painting had its predetermined place, its destination, its setting; it was part of a whole, in harmony with the other elements. Mural painting came first, but even the later easel pictures had their situation, their surroundings, their calculated lighting. Nor can we pronounce the word sculpture without the thought of immortal masterpieces, conceived and executed for a monument, for a certain spot, whether it be the work of Phidias, the carvings of cathedrals, or the Medici tombs.

Nevertheless, there may be ample temporary justification for the assumption by museums of the patron's rôle: just as there is temporary justification for the union of art

"As for those works of art which survived their time, like the antiques discovered by excavation — those works which necessarily had no modern applicability — these were at first collected by private individuals, or, we should rather say private individuals, real amateurs, lived with them, gave them a place in their intimacy, arranging them in their drawing rooms, their library, their dining rooms, the vestibules or porticos of their villa. But as their number has increased and princely wealth decreased, a shelter has become necessary for such remains of the past. For them the museum is legitimate, since it is their means of preservation, a token of respectful piety toward that which without this refuge would be an objectless waif.

"Yes; asylum, Campo Santo, cemetery, whatever one may call it: a museum is a kingdom of the past, a place for the preservation of that which is no longer living. Even masterworks, if no other abiding place is open to them, will come and bury themselves here. Though stripped of all that constituted their environment, their significance, their raison d'être, here they will at least be protected, and if seen imperfectly and judged wrongly, still they will be seen and their

meaning can be divined.

"But the curious notion has arisen of late that to be inscribed in a museum catalogue is the happiest fortune to which a work of art can attain. We see in the Louvre — and it is a monstrous thing — sculptures whose place at Versailles and Fontainebleau is empty. The beautiful chimney piece at Fontainebleau is despoiled of the equestrian bas relief of Henry IV by Jacquet de Grenoble, and there are even fanatics who propose to rob the Arc de l'Étoile of Rude's bas-relief (Aux Armes) for the benefit of a museum gallery! Stranger still, we have museums of living artists!

"And what happens then? A museum of living artists calls for works made for a museum, that is, works without purpose, without significance, without reason for existence! An art of virtuosi, perhaps, of clever people, but a sterile art all the same, and at all events inferior; for there is no truly great art but such as

consecrates itself to a higher and disinterested mission."

In Kunstsammlungen aus alter und neuer Zeit (1899, p. 29) Professor Adolf

Furtwängler writes:

"There is a third kind of art museum which I have not thus far mentioned: those, namely, devoted to living art. These I hope will in the coming century disappear; and I wish this, not from antipathy to living art, but out of regard for it. It is solely those conditions in our time which have been hostile to art that have brought forth these collections. Real museums are the home of art that has passed away, of dead art, into whose remains we have to live ourselves laboriously. What hangs on museum walls is there mainly as an object of exacting study to whose understanding we must pave our way by investigation of the past. Far be it from modern art to wish while alive to be treated like the art of antiquity!

"We gather the remains of the past into the conglomerations we call museums because we must; but that which is modern and alive should scatter itself where-ever modern life is found. Let as many temporary expositions as possible of modern work be arranged on private or governmental initiative. But in monumental museums, conservators of ancient things, the modern do not belong; they have but strayed in thither as into the only asylum for art in a time ignorant of

museum and art school well-nigh universal in this country. As in undertaking technical instruction, so in the purchase of prize painting and prize sculpture, the American museum of the present acts as a nursery for future independent agencies. The educational and commercial activities of our museums of art bespeak at once the vigor and the youth of our civilization. Maturity brings differentiation; and in due time these forms of organized effort in the cause of art will be performed apart from museums, education by academies of art, patronage by societies, institutions and political units of all kinds.

To the question thus far discussed — What ought museums of art to collect? — the answer is, old things needing shelter. Any work of art worth permanent publicity, and likely otherwise to be deprived of it, is a proper acquisition for museums of art.

How may this duty be more closely defined? Artistic qualities being the purposed characteristics of a thing that make it pleasing in itself, these qualities may either have been purposed in advance or ex post facto: either sought for by the artist or simply accepted by him; they may be the fruit, to use the customary words, either of skill or of genius. A museum should aim to preserve objects which exhibit either to its own judgment or a judgment which it regards as wiser, the highest qualities of both kinds. In a phrase happily coined in the course of an official document,

how to make practical use of it. The contemporary theory of its purposelessness helped; but of this the healthy taste of classic times knew nothing, creating all its art works for definite purposes. May such tasks fall again to our artists! And may city and nation aid living art, not by buying its creations and immuring them among the dead, but by the offer of living tasks! Of these there will be no lack if they are more widely sought. Why are not our churches, our cemeteries, the corridors and foyers of our theatres, our concert halls, the waiting-rooms of stations, our reading-rooms and public baths, our halls of justice, — why are not all these full of new works of art? Works that from time to time might be varied and exchanged, to arrest attention continually? Our future watchword should be — Joy in fresh and living art and immediate and multifarious employment for it — Reverence, loving understanding, and protection for the works of the past."

museums of art should seek to acquire "the best obtainable works of genius and skill."1 The museum of art exists that the world shall not lose the best things. Whether the best obtainable is of wider or narrower appeal is a question before a museum only when other things are equal ceteris paribus. The point always at issue is not whether more or fewer people will approve, but whether the object is more or less worth approval. We may, indeed, believe that many of the things which are best worth approval will prove the things also of widest appeal. In the words of Renan, quoted by Matthew Arnold, "Glory is after all the thing which has the best chance of not being altogether vanity." But we may, and indeed must, also believe that the best exists in countless other forms — the best for me. not being the best for you. We may believe that all have an equivalent, because an infinite, share in it without believing that all have the same share. The duty of the collector for a museum is to follow his own carefully exercised judgment unaffected by the judgment of others, unless he see valid reason to prefer it.

One consideration narrows and one broadens his choice. By the phrase worth permanent publicity we mean at least to exclude blundering workmanship. The artist must have said his say, been able to express himself. There must have been an intention behind what he has left us; else it is not a creation but material unformed. Mastery must be the watchword of good collecting for museums. Shall this be the only watchword, or shall we hold that the question What an artist says, as well as the question Whether he says it must be answered also? It will hardly be disputed that the exclusion of unintended performance and the inclusion only of work showing a command over means of expres-

¹ Special report of the Committee of the Museum on the Increase of the Collections: included in the *Annual Report of the Museum of Fine Arts* in Boston for the year 1883.

sion, although for practical purposes a sufficient rule, is not in theory all-sufficient. It is possible, though not likely, that a worthless or evil message may be well delivered. Reserve and charity should govern here. Let us be very sure that in our own estimation the intention of the artist is actually worthless or evil; and if ourselves convinced, let us still leave a large margin for the possible revision of our judgment by others wiser. Let us err by including rather than by excluding too much. If the watchword Mastery, relating to the artist's ability, needs a complement in a watchword relating to the collector's taste, let Catholicity be the word chosen.

It remains to ask — How does a museum obtain its collections? In three ways: by discovery, by gift, and by purchase.

Discovery, the work of the explorer into buried civilizations, merits the first rank among avenues of growth. Its results are so many additions to the world's riches, not simply transfers of ownership, as are gifts and purchases. But discovery is also a difficult and limited source. Asia, the Levant, and in a minor way, the Americas, still possess forgotten riches; but knowledge and skill of the rarest type is demanded to find them, and the time seems in sight when there will be no more to find. Meanwhile, and until museums have fulfilled to the utmost possible their positive rôle of discovery, it should be their pride not to resign themselves wholly to their negative rôle of salvage.

Gifts have a valid title to the second place among ways of acquisition. Their value may be greater than the value of purchases ever can be. Acquisitions by purchase are limited by what is purchasable and by what the museum has to purchase with. Acquisitions by gift have no limits but the possessions and the generosity of other owners. Again, time is more likely to justify the decision to accept than the decision to purchase. The gift has survived two

tests; the judgment of the giver and his advisers at the time it was acquired, and the judgment of the museum and its advisers at the time it was accepted. A purchase undergoes but one. It need satisfy only the authorities of the museum. Hence the probability that an acquisition will not be repented of is higher in the case of gifts. On the other hand, gifts are seldom the unconstrained choice of the recipient. Some obligation, tacit or explicit, generally accompanies them, either augmenting the value of things otherwise unacceptable, or decreasing the value of things otherwise welcome. Mr. Dooley's phrase "defince-less museems" indicates that the burden which gifts may impose upon museums is a matter of common knowledge.

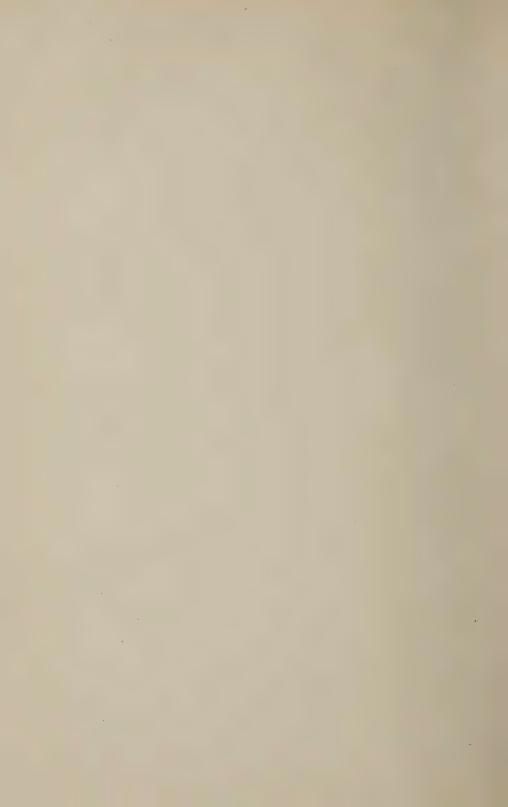
The two explicit obligations most commonly attached to gifts are that they should be always kept, and, if a number of objects, always kept together. Of these two conditions, the first, — that the gift shall be held in perpetuity, — imposes on a museum no less a responsibility than that of deciding whether a given work of art is immortal; for, unless it be thought so, no museum ought to agree to keep it forever. The more enlightened and responsible a museum management, the more reluctant it will be to make this hazardous affirmation, and the more frequently will works of art so conditioned be declined when otherwise they might gladly have been given an honorable place in public view. It is true that without this condition there is always the possibility that the gift may be disposed of by some future management. But the higher its quality and the broader their taste, the less is this event to be anticipated; and to provide against it signifies mistrust of one or other. Better to leave the gift to the judgment of the future, which if it reverse that of the present, will at least preserve the name of the giver from identification with a work from which the world has grown away.

The condition of permanent ownership would in most cases be fulfilled without any promise; but the second condition, that works given together should always be shown together, would in the absence of express agreement, almost invariably be violated. They would be shown apart because so shown to the best advantage. The effect of the individual pieces of a private collection will almost always be heightened in settings arranged for them from other exhibits of a museum. Almost always, therefore, the provision maintaining a collection as an insoluble group works against the common aim of both the conditions mentioned; for by its operation the giver comes to be remembered with less honor than his gifts warrant.

The common aim of the two conditions is the desire that the gift should fitly and enduringly recall the personality in whose name it is offered. Every museum owes scrupulous regard to this legitimate and praiseworthy desire, and should accept without hesitation the obligation it imposes. Permanence of recognition is of the essence of this obligation. Hence, if the gift is parted with in part or wholly, the name should be kept by transfer to other objects of equal rank. If a collection is distributed through various galleries, the name should be distributed with it. The interests of a museum and of those who seek commemoration for themselves or others within its walls are identical. Names attached to acquisitions of the museum both recall past benefactors and inspire future benefactions. Freedom to dispose of a gift gives it a public position under the giver's name whenever, but only so long as, it is an adornment to both. Freedom to disperse a collection among surroundings that enhance each piece fulfills not only the museum's purpose to make each possession tell to the utmost, but the desire of the giver for remembrance with distinction.1

¹ Maxime Maufra, Le Musée (January, 1907), pp. 16, 17.

Acquisitions by purchase have at all times been the smallest source of museum growth; and doubtless will remain the smallest. However the purchasing funds of museums increase, they are not likely to equal those which future collectors may have at their command. In its turn, a permanent public institution commands a superior type of professional skill and information, with a wider outlook on artistic history. Museums are in a position to be snappers-up of unconsidered trifles that time will prove treasures. Their special province as purchasers is that of passing opportunities insufficiently appealing to current taste. There may often be fortunate chances also which warrant their competing with current taste; and of these they will be in a position to take advantage in the measure in which contributors to their funds come to value disinterestedness, refinement, and scholarship in matters of artistic judgment.



II CONSTRUCTION

THE IDEALS OF DIAGONAL LIGHTING AND RADIAL EXPANSION



CONSTRUCTION

THE IDEALS OF DIAGONAL LIGHTING AND RADIAL EXPANSION

]

A MUSEUM WITHOUT SKYLIGHTS 1



FIGURE 1. SCHEME OF ELEVATION

1. The skylight. A roof, not walls, constitutes a house. Sun and rain, not wind and cold, have forced men to build. Overhead protection alone may give all necessary shelter. The fact is registered in the free treatment of walls conspicuous in the architecture of the Far East. In Oceania they are absent. In Japan they are removable.² In China the pagoda derives from superposed umbrellas. Series of eaves arranged to give lateral protection appear in the blinds of our Western houses. But no human shelters in any time or country lack a roof. Without an opaque and impervious covering an enclosure is not an interior but an exterior space, not a room but a court. Unless designed as

¹ Reprinted from Museumskunde, Band VII (1911), Heft. 4.

² The word "roof" (yane) in Japanese means "house-root" (E. S. Morse, "Japanese Homes and their Surroundings," New York, 1889, p. 107): i.e. as we may infer, the constitutive part of a house.

a meeting-place and not as a dwelling-place, its effect will have the flavor of mediocrity that betrays latent unreason.

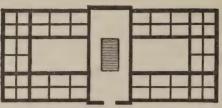


FIGURE 2. STANDARD MUSEUM ARRANGEMENT

Apartments treated as interiors while lighted from above are a *faux genre* in architecture.

2. The clerestory. The vrai genre of internal apartment—

or chamber surrounded by others - appeared in the de-

sign of Roman basilicas and their successors, Christian churches. The court which the basilicas inherited from earlier architecture was made a room by rais-

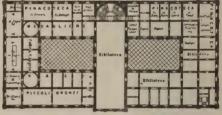
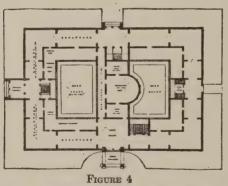


FIGURE 3. MUSEO NAZIONALE, NAPLES, 1586

ing its walls, roofing them, and providing them with win-



Design for First Museum of Fine Arts, Boston, 1871

dows. It became an audience hall, or nave, receiving high, oblique light from the raised walls, or clerestory: and the neighboring spaces served for withdrawal, or passage, as bays or aisles.

3. The standard museum arrange-

ment. The clerestory principle is immediately applicable to a type of museum plan whose frequent use approves

it for museum ends, although it was originally designed for others. This plan provides exhibition space about two

large areas separated by a structure containing the main entrance and stairway of the building (Figure 2). More museums adhere to such a general arrange-



KUNSTHISTORISCHES HOFMUSEUM, VIENNA, 1872–81

ment than to any other. The exhibition space is mainly

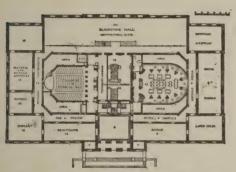


FIGURE 6. ART INSTITUTE, CHICAGO, 1893

a single suite in the Old Museum, Berlin (1825–28), the New Museum, Berlin (1843–45), the National Museum, Stockholm (1866), the Pennsylvania Museum, Philadelphia (1876), the Ryksmuseum, Am-

sterdam (1877-85), and several other large museum build-

ings. It is mainly a double suite in five others whose plans are here reproduced. In the Naples Museum, built (1586) for a cavalry barrack, the spaces in the double row are



FIGURE 7
NEW MUSEUM OF FINE ARTS, BOSTON, 1909

of nearly equal size, and the stairway is at the opposite end of the central block from the entrance (Figure 3). In the design for the first building of the Museum of Fine Arts, Boston (1871), of which but half was ever executed, the main stairway adjoins the central block (Figure 4). In the Kunsthistorisches Hofmuseum, Vienna (1872), the inner suite on the ground floor (the outer on the main floor) consists of cabinets (Figure 5). In the Art Institute, Chicago (1893), the cabinets have become corridors and the courts contain top-lighted rooms (Figure 6): and a similar development of the standard arrangement appears as a fraction of a scheme devised to meet special needs and opportunities in the ground floor of the central block of the Museum of Fine Arts at Boston (1909: Figure 7).

- 4. The clerestory development of the standard arrangement. The arrangement now consists of two large, top-lighted apartments, separated by a top-lighted stairway hall, and completely surrounded by passages giving access to exterior rooms. Applying the clerestory principle to this arrangement, the walls of the two large interior spaces are raised and pierced, forming two naves which receive their light from windows above the surrounding roofs, and lend it to the corridors about them: and a lantern is added over the stairway hall joining the naves. The present scheme of a museum without skylights is the outcome (Figures 1 and 8).
- 5. Purpose of the sketches. The sketches in which this scheme is here presented are not from a professional hand, and have no professional purpose. They are diagrams, aiming first to express a certain disposition, proportion and assignment of spaces more perfectly, easily, and quickly than would be possible by a verbal description: and second to indicate to the eye that the structural scheme proposed might not be impossible architecturally. To have gone further, and have attempted to correct and perfect the sketches technically would have been a task alike impossible to the writer and unfruitful to the reader.

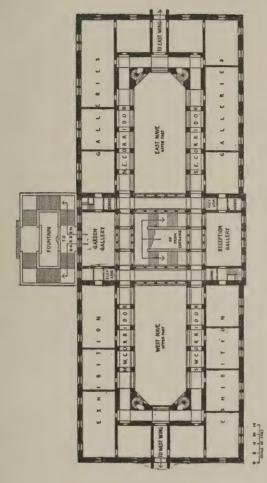


FIGURE 8. MAIN FLOOR

- 6. The problem of the roof. An important practical benefit and an important æsthetic advantage result to the standard museum arrangement from the application of the clerestory principle. Replacing a quasi-court by a true nave replaces a re-entrant roof, leaky in rain and darkened by snow, with a salient combination of slopes and window walls. Replacing the skylight over the main stairway by a lantern gives the exterior a crowning central feature.
- 7. The problem of access. It proves, further, that this radical solution of the problem of lighting a museum lends itself to an equally radical solution of the problem of access therein. As a theatre is designed for spectators, or a throng seated to see: an auditorium for auditors, or a throng seated to hear: a bridge for crossers, or throngs passing and repassing over an obstacle: so a museum is designed for visitors, that is, for throngs moving from any one of certain spaces to any other, to see the contents. Apart from well-designed light openings, spaces freely communicating are the prime requisite in a museum plan. This requisite the present sketches meet by giving independent access to every room.¹
- 8. Independent use and free combination of galleries. Two important advantages in museum economy result. By closing the doors of communication shown in Figure 8 between rooms, and opening the doors of entrance to other rooms from passages, any one or more rooms may be shut off without hindering access to any other. Again by the same process, the exhibition space of the building may be subdivided into groups of galleries in various ways. The value of the first freedom will be appreciated by every museum administrator. In most museums, whenever a gallery is rearranged, redecorated, or otherwise withdrawn

¹ In "Aims and Principles" (see Appendix), the principle called "Segregation" demands independent access to each suite of galleries assigned to cognate exhibits.

from public use, either the passage of visitors through a whole section of the museum is blocked, or the paraphernalia and personnel of museum work is exposed to public view and interference. Moreover, objects in transit must be brought through other galleries. The second freedom — that of recombining galleries into new department groups — is of prime importance in every growing museum. Only collections approximately finished, or whose extension can be approximately foreseen, can afford to dispense with it. In the present scheme, any department could annex a neighboring room, and still remain — and leave every other — a connected and independent suite.

- 9. Selective exhibition. Resting places. Beside offering solutions of the problems of lighting and access, the present scheme provides for two other recognized desiderata of museum administration: the division of collections into a Show and a Study series, and the forestalling of museum fatigue. For the immediate accessibility of both floors from the Entrance Hall permits the independent use of the lower, including the naves, for secondary purposes: and the extensive passageways of the plan afford the visitor ample opportunity for diversion of mind and relaxation of body.¹
- 10. Chief results. These are the main claims of the design. Originating in the wish to escape a traditional architectural solecism, a clerestory development of the standard arrangement promises within its limits of exhibition capacity, a happy response to four principal demands of museum administration: light, access, division of the collections and provision for recreation.

The adaptation of the structure to further museum needs may be passed in review by approaching and traversing it in imagination.

^{1 &}quot;Aims and Principles" demands provision for rest in stating the principle of Segregation: and proposes the division of collections under the title of "Dual Installation."

11. Minimum shadowing of windows. From a museum standpoint the most striking external novelty of the building is the free exposure of all its important windows. In most large edifices projecting structures conceal part of the sky from spaces which nevertheless need all the illumination practicable. The familiar subdued or gloomy impression of rooms at the corners of courts, at the junction of wings, or under the shadow of roofs, is the result. In the present building this impression would be practically unknown. Re-entrant angles occur at but two points in the design, and at neither affect the lighting of primary exhibition space. The corridors to the wings shadow only the adjacent ground floor windows: and the transverse block shadows only a small portion of the clerestory, at this point reënforced by the lantern. A museum is an institution devoted to the use of the eyes, and it is a marked advantage of the present scheme as a museum plan that it obviates the retrenchment of any important source of light.

12. The grounds. It is assumed that the building will not be shadowed by others. To this end free space of eighty

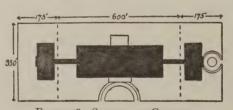


FIGURE 9. SCHEME OF GROUNDS

or a hundred feet is needed about it, as shown in the diagram (Figure 9). With a boundary at this distance, the plot occupied by the main

building measures about three hundred and fifty by six hundred feet and covers an area of about five acres: the wings adding one hundred and seventy-five feet at each end, and enlarging the plot to nine acres.

13. The entrances. Of the long sides of the structure one is determined as the coté cour by the main entrance: the

other as the *coté jardin* by the external stairway. The business entrance is as far as possible from either, on a short side, accessible from a transverse street.

14. Architectural type. The main building shows a light superstructure on a heavy base—as it were a Sainte-

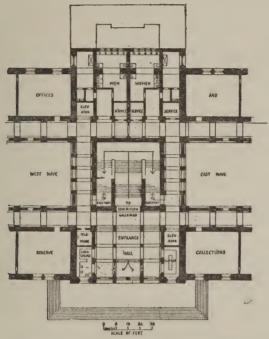


FIGURE 10. CENTRAL BLOCK: GROUND FLOOR

Chapelle over a Palais de Justice — and to the lay mind would appear to offer a good subject for architectural treatment. Romanesque forms have been employed in Figure 1 because best suited to the writer's powers as a draughtsman.

15. Ingress and egress; cloak-rooms and sales-office. Figure 10 shows the ground-floor plan of the central block. The Entrance Hall is flanked on the right by a cloak-room of which a counter is directly opposite the entrance turnstile:

and on the left by an office for the sale of publications and photographs, of which the door is directly opposite the exit turnstile. Passage forward into the Entrance Hall is prevented by a hinged barrier folding back against the turnstiles to give an unobstructed exit sixteen feet wide to crowds. The side passages, where those waiting for wraps, or to make purchases can stand outside the main stream of passers, add twenty feet to this exit width. The two counters of the cloak-room, together twelve feet in length, insure rapid checking and delivery on ordinary occasions. To meet the extra demands of bad weather and great crowds, the room beyond might to advantage be reserved as an auxiliary cloak-room, communicating with the first and with a delivery counter thirty-five feet long opening in, or reached from, the transverse corridor. The opposite office consists of a sales bureau, eight by ten feet, with a counter and cabinets, and a waiting room, ten by twelve feet, with table, desk, and chairs for the inspection of photographs at ease under a good light.

- 16. The Entrance Hall. The Entrance Hall itself is planned as a vaulted apartment thirty by forty-six feet and sixteen feet high. A few steps lead to an arched corridor on the level of the rest of the ground floor, nine feet wide between pilasters, and fourteen feet high. This corridor runs around the naves, and is lighted from the rooms outside by lunettes at ten feet from the floor. Figure 11 shows that from the centre of the Entrance Hall, looking across the corridor, an arched opening at the foot of the stairway frames in the landing, conceived as panelled in masonry, and the row of low arches on the main floor above, opening into the corridor and the Garden Gallery beyond.
- 17. Hall seats; bulletin board; drinking-fountain; elevator; telephone. The niches, eight feet long, on either side the Entrance Hall, just before reaching the steps to the corridor,

would be available for seats: and those in the corridor, on either side the stairway entrance, for the posting of notices. The first niches in the corridors along the stairway might

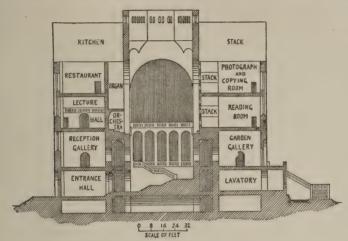


FIGURE 11. CENTRAL BLOCK: SECTION

contain drinking-fountains. A passenger elevator, nine by ten feet, running from the basement to the upper floor opens opposite the right-hand stairway corridor, and a public telephone booth of like size opposite the corridor on the left.

18. The basement. From these corridors stairs lead to the basement, planned with an interior height of eleven feet, half below ground. Its corridors, duplicating those shown in Figure 8, are lighted in the same way from the external rooms, and would need artificial light only under the central block. The spaces under the naves would be available for dark storage and for heating and ventilating chambers. That under the Entrance Hall might be used for vaults accessible on either side, from rooms devoted to departments, or to the administration of the museum.

19. The lavatories. The stairway corridors on the ground floor end in the transverse rear corridor, giving access on

the one hand to department rooms, and on the other, by a lobby, to the public lavatories and retiring rooms. The public lavatories of a building used daily by hundreds and sometimes thousands of persons should occupy two entirely independent and easily distinguishable localities, both near the entrance and easily found therefrom. They should be inconspicuous and impossible to oversee from any thoroughfare, and their immediate approach should not need to be entered for any other purpose. The locations here assigned them meet these requirements. The direction given in the Entrance Hall need only be "Down the right (or left) hand corridor." At the end the lobby of the lavatory, leading from a short corridor of two bays, ending in a locked service door, would be identified by a sign. No sign would be needed in the corridor outside. The doorway of the lavatory would not be seen from the stairway corridor, and opens, not into the room itself, but into a vestibule. The room is lighted by high windows overlooking the fountain. The adjacent retiring room for cases of illness is independently accessible and has its own lavatory.

- 20. Service closets. The three adjacent closets marked "Service" are designed as storage space for implements of cleaning, stepladders, and other apparatus used by employees. One should be fitted as a wash closet. The reservation of convenient space for these purposes is indispensable for the proper housekeeping of a museum building.
- 21. Offices and reserve collections. The rooms reached in the other direction along the rear corridor are planned as department offices and for the compact installation of collections in reserve. They are twenty-eight feet deep and lighted by windows with sills at the customary height. In rooms devoted to inspection rather than exhibition it should be possible to bring objects near the light.

22. The naves. Midway in each stairway corridor three doorways open upon one of the naves of the building, conceived as a vaulted apartment forty-four feet wide, one hundred and two long, and eighty-eight high, ending in a half octagon, and opening by arches eighteen feet wide on centres, under a clerestory, into the main floor corridors as into the triforium of a cathedral. On the oblique faces of the octagon the arches, and in part the windows of the clerestory, are replaced by openings showing the ascent of the spiral stairways indicated in Figure 8, which connect all the floors of the building and terminate in an external ambulatory over the corridors and triforium at the base of the clerestory. For sixteen feet from the floor of the nave its walls are unbroken except by the piers (if these are carried to the floor) and by an occasional door of communication with the corridor: and afford in each of ten bays a wall-space fourteen to eighteen feet wide and as high as pictures can generally be hung, or as statues commonly reach, lighted advantageously for exhibition purposes from the clerestory. This space is framed above by the parapets in the bays of the main floor corridors, overlooking the nave.

23. Nave divisions. Were deep metal sockets buried in the masonry of the nave floor, opposite to and eighteen feet from each pier, standards and connecting panelling could be used to divide one or both naves for temporary purposes into a central thoroughfare eight feet wide, and side cabinets eighteen feet deep and multiples of eighteen feet in length. At the octagon the standards and panelling might be adapted to form a small stage with an opening eighteen feet wide and sixteen feet high and exits upon the stairways. Since such divisions would follow the structural lines of the nave, both perpendicular and horizontal, they would in whatever combination form a harmonious addition to the

architectural composition of the interior. They might be of permanent construction, fitted once for all and stored in the basement when not in use.

- 24. Nave vista. Seen from the apse the nave is terminated by the entrance wall with its triple portal, and by the colonnade crossing upon it like the jubé of a cathedral. Above appears the opening of the lantern, and beyond, the vaulting of the other nave.
- 25. The main stairway. From the Entrance Hall the main stairway ascends by a broken flight to a landing twelve by forty-four feet with space for seats, from which further broken flights ascend backward on either hand to the main floor. The lantern rises overhead between the two double colonnades crowned with parapets, over the stairway corridors. Figure 11 shows that between the colonnades and over the lower arches opening into the rear corridor the wall of the library stack fills an arch like that of the naves, pierced with small windows and surmounting a narrow balcony immediately over the arches. Opposite, a similar balcony opens into the Orchestra Gallery, the space above being available for an organ.
- 26. The Reception Gallery. Across the corridor from the top of either flight of the main stairway an arch opens into the room called on Figures 8 and 11 the Reception Gallery, thirty by forty-six feet, like the Entrance Hall below. Since the main stairway brings every one to this point, here might be displayed recent acquisitions of the museum, or any other objects to which it is desired to call temporary attention. On occasion, heavy timber screens might be erected eight feet away from the doors at each end, leaving an intermediate space thirty feet square for the undisturbed inspection of pictures hung on the screens, or of pieces of sculpture, or case objects, displayed within the area.
 - 27. The circuits. The end doorways lead toward the

suites of galleries forming the primary exhibition space of the museum. Apart from the wings, the whole museum is visited by simply keeping on from this start. Nevertheless, the visitor is not forced to go on, but may cut his visit short and return to the main entrance, without retracing his steps, at the two points where he crosses the corridors to the wings, and again in the Garden Gallery, as well as in any gallery where the door to the corridor provided in each is open. Hence the scheme, while putting no obstacle in the way of visitors who wish to see the whole museum, invites also the more rewarding habit of confining a visit to a single branch of the collections. However these are outlined, whether by the four suites of which the floor is composed, or by doors closed in the course of the suites, the tour of any department will bring the visitor upon one of the corridors. The scheme even admits of realizing the ideal in which each gallery becomes the quiet home of its contents, disconnected from every other and opening only on a common passageway. Closing all the doors of communication shown in Figure 8 and opening all the doors of entrance, each gallery would become a separate department, entered only for its own sake, and through which there would be no passing whatever. The union of any number of the galleries into one department likewise encounters no obstacle. The axial corridors - narrow lobbies gained and left through opposite doors — would be no serious interruption to the impression of the rooms they separate, and would lead no one astray: and the Garden Gallery might be installed like the others. Any half, or three quarters, or the whole of the galleries of the main building might thus be devoted to one sequence of exhibits.

28. The corridors. The corridors themselves are admirably lighted for exhibition purposes from the clerestory. An exhibit on the wall and a desk case in the opposite bal-

cony would not interfere with passage, nor would their appeal obtrude upon the visitor bound for another branch of the collections. These exhibits might either be associated each with that of the neighboring gallery, or form together an independent class.

- 29. The lobbies. From both the Reception Gallery and the Garden Gallery access is gained to the adjacent exhibition galleries through lobbies. The elevators have doors on the lobbies giving direct access to small cabinets available as private cloak-rooms on special occasions. The lobbies opposite contain stairways to the floor above and service closets like those on the floor below.
- 30. The exhibition galleries. The rooms on the main floor are all twenty-eight feet wide and are represented in Figure 8 as of varying lengths. They are twenty-four feet high and, with the exception of the Garden Gallery, are lighted by windows with sills at half this height1 from the floor and running to the ceiling. This method of illumination is proposed for three reasons: to give the exhibits the advantage of high oblique light: to keep the source of light out of the visitor's eyes: to permit the use of the lower part of the window wall for the installation of objects not requiring to be seen at a great distance.² Reflected rays from the upper part of the other walls, perhaps also from the ceiling, would admirably light the lower part of the window wall for any one standing near enough to escape seeing the windows above. It is assumed that ceilings generally throughout the building will have visible means of support, either vaulting or beams on corbels.

¹ Preferably two thirds or more. "The general conclusion was that side light must be high, beginning at a height at least two thirds of the width, extending to a height equal to width." From a notebook of observations abroad by two architects.

² Leonardo advises sketching when objects cast shadows equal to their height (*Libro della Pittura*, cap. 85). These windows should be so treated architecturally that the sills of any could be lowered when needed for special collections.

31. The spiral stairs. The building has been planned with the idea of dividing the space devoted to each branch of the collections between two floors, the lower assigned to the offices and reserve collections of that branch, and the upper to its exhibition galleries. Each department is thereby equipped for both the purposes for which objects of art are preserved — public exhibition and private study: and a convenient means of communication, for both the museum personnel and visitors, between the spaces devoted to the two purposes becomes necessary. This is the function of the spiral stairways at the ends of the four corridors. They would serve instead of the main stairs for department uses, and in general would save steps. As they continue to the basement they afford independent access

also to the storage and administration rooms of the museum.

32. The Lecture Hall. The stairway from the Reception Gallery leads to the Lecture Hall (Figure 12) likewise thirty by forty-six feet, with a height of twenty-one feet and seating about two hundred persons. The rostrum at the opposite end from the entrance is flanked on one hand by the doorway of the elevator, and on the

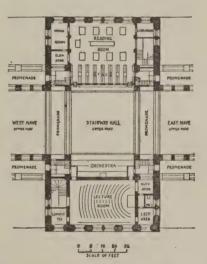


FIGURE 12
CENTRAL BLOCK: SECOND FLOOR

other by a door to a cabinet for the speaker, communicating by a passage with a private lavatory and with the elevator. The cabinet of like size at the opposite end of the room would be available for private conferences. The

windows of the room being on the side, the light is not in the eyes of either the lecturer or the audience.

33. Ambulatories. 34. Restaurant; Orchestra Gallery; organ. Two small exits at the end of the opposite wall lead to lobbies with stairways up to doors upon the ambulatories, or promenades, which surmount and express externally the corridors about the naves. The stairway by the elevator goes no further, the space above being available for part of the organ. The elevator and the other stairway run to the top of the building, giving access to the restaurant over the Lecture Hall and the kitchen in the gable. These positions are chosen to separate these rooms wholly from the rest of the museum, and to prevent the escape of the odor of cooking into the galleries. Supplies would be brought from the basement in a closed compartment underneath the floor of the elevator. A low passage on the level of the Lecture Hall and running under the ambulatories would permit employees to use one of the spiral stairways to the basement when necessary. In this passage and in the corresponding one opposite there should be two small public lavatories (for women on the elevator side, for men on the other). The small stairway next the main entrance to the Lecture Hall leads also to a gallery opening on the Hall, from which the lantern would be operated when illustrated lectures were given. The small exits from the Hall open also into the Orchestra Gallery with space for thirty or more musicians. From the lobbies doors under the small stairways open upon the cross promenades on top of the colonnades overlooking the naves.

35. The Garden Gallery. On the main floor the Garden Gallery is the only room in which the windows are at the usual height and afford a view out. Central doorways open on the external steps descending about the fountain to that side of the museum property which is supposed to be laid

out as a pleasure ground. Any overflow of new exhibits or other objects of special claim might be shown in the Garden Gallery. Apart from any use for exhibition the prospect on the garden would give the room an interest of its own.

36. The Reading-Room; the Copying- and Photograph-Room. The stairway in the adjoining lobby leads to the Reading-Room overhead, likewise twenty-eight by fortysix feet, and twenty-one feet high. A cabinet for the librarian, nine by eleven feet, adjoins the entrance. The attendant's desk on the opposite side is flanked on one side by the doorway of the elevator, and on the other by the door to the Catalogue-Room, eleven by eighteen feet, and having a small door on the elevator, for the receipt and delivery of books. The wall opposite the windows is wholly occupied by stacks in three tiers, forming alcoves directed toward the windows and hence well lighted, and having also windows giving upon the lantern. The alcoves above the floor communicate by doorways in the stacks. A booklift occupies the end of the central stack toward the room. The end alcoves open into lobbies with small stairways like those adjoining the Lecture Hall, and also by a few steps down, upon a narrow balcony opposite the Orchestra balconv. Passages from these lobbies under the ambulatories. similar to those across the nave, should also contain small public lavatories, for the use of readers. The small stairway in the lobby on the entrance side, like that across the nave, runs only to the ambulatory and to the space over the entrance stairway and librarian's cabinet. This space would be available for general library purposes. The other small stairway and the elevator, run to the top of the building, like those across the nave, giving access to the Copying- and Photograph-Room above, planned in the main like the Reading-Room. The stack space of the two forms a unit served by one central booklift. Without the indicated expansion into the gable above, it would accommodate thirty thousand books and one hundred thousand photographs, a large library of fine art. The tables indicated are small, each giving space for at most four readers.

37. Recreation space. The ambulatories about the base of the clerestory complete the provisions of the building against museum fatigue. The plan provides three recreation spaces: one indoors, for all weathers, consisting of the square of corridors about the stairway on the main floor, together with the Garden Gallery: two outdoors, for fine weather, one on the ground, consisting of the garden with its stairway approach, the other on the roof, consisting of the ambulatories reached by the four spiral stairways and also by the lobbies just mentioned. Since but a short flight in one of these lobbies separates the restaurant from the southwestern ambulatory, doubtless this would come to be used as an open-air lunch-room.

38. The colonnades. The focus of the museum, at its centre both in plan and elevation, is the corridor space about the stairway on the main floor. From this point its life is open to the gaze in every direction. Visitors entering are seen as they mount the stairs or pause on the landing. Through pillars and arches appear the Reception Gallery, where those just arrived delay to choose their way, and the Garden Gallery, where others midway in their visit halt for the prospect from the windows, or for a turn in the garden. The naves open below, and about them, on the level of the eve, appear the bays forming their triforium. A door here and there may even give a glimpse into the exhibition galleries beyond, but otherwise visitors to the collections are withdrawn from the central life of the building. Through the triforium arch of the middle bay of the half octagon at the end of each nave the view extends two hundred feet to

the limit of the structure: and if there are wings, one hundred and fifty feet farther to and into them through the connecting corridors. Were these corridors constructed of glass and used as conservatories, each vista would end in a mass of plants and flowers under outdoor light. Finally, the view from this point extends also upward between the arches of the crossing past the windows of the lantern to its apex.

39. The uses of the naves. The museum uses of the largest and most ambitiously designed spaces in the building remain to be determined. The naves should subserve other purposes than that of giving architectural validity to an approved museum arrangement. It is here proposed to devote them to four factors in museum economy demanding space apart from the regular galleries: first, monumental fragments: second, temporary exhibitions: third, the display of designs: fourth, assemblies.

40. Monumental fragments. In the exercise of its fundamental function of the salvage of things worth keeping. a museum may at any time be called upon to give asylum to objects of greater size than can be shown in galleries fitted for general use — as remains of architecture might be. Without some large spaces like the naves at its command a museum would on such occasions fail perforce in its duty. They would seldom occur, but a museum is dedicated to perpetuity. Meanwhile there is another class of objects — namely, plaster reproductions of sculpture elsewhere — which a museum is often called upon to show, and which demand exceptional space. This space should be wholly apart from that devoted by the museum to its works of art. The mingled exhibition of mediate and direct utterances of gifted men disenchants where it does not misinform. To install casts of sculpture separately from, and literally on a lower level than, works of art is to give a

salutary object lesson in the incommensurable value of reality and reproduction.

- 41. Temporary exhibitions. In a museum dividing its collections into exhibits and reserves the exhibition of any given object is liable to be intermittent. But the risks of mounting and dismounting, and the right of the public to see masterpieces at all times set limits to the practicable changes of exhibition, and the freedom to show selected objects without disturbing those already in place may be a valuable one as in the case of notable acquisitions, or opportunities for illustrative exhibits. Again, the museum could offer the naves for temporary exhibitions from outside sources wandering collections, or other loans without interfering in any way with the regular administration of its own resources. It could be hospitable without suffering for it.
- 42. The display of designs. Another class of exhibits both temporary and of large size — for whose display the naves would be available, are not vet to be called works of art. The public museum of a city may appropriately be the place where sketches and models of projected monuments and schemes of city adornment are submitted to the judgment of those in authority and the inspection of others interested. The conditions offered by the naves might even be more advantageous than those which would surround the monument when executed. The light would be reliable, the space doubtless in most cases ample, and large models of sculpture or architecture could be examined not only from the ground but from the triforium bays. Beside ensuring these favorable conditions, exhibition at the museum would call in advance to the attention of all, works of art designed for the eventual enjoyment of all.
 - 43. Receptions; concerts; plays; readings; pageants. For

another purpose, large spaces apart from the rooms devoted to collections, and independently accessible, have become an acknowledged desideratum of museum planning. It is recognized that a building full of artistic memories and expressing in stately form a pious regard for them presents an appropriate setting for gatherings more or less directly related to the life of the imagination. People may wish to come together socially to congratulate each other over the treasures acquired. They may wish to see drama, or hear literature from, or relating to, the past, in the atmosphere produced by tangible objects that gave another expression to the same instinct of creation. They may wish to listen to music under the spell of other arts. They may wish to join in a work of cooperative art — ceremony or spectacle — under the same spell. To oppose these wishes would be to deny to the works of art preserved in museum galleries the right to share as fragments in solemnities and gayeties such as they were made to adorn intact.

44. The two museum ideals. The picture of a possible museum which the imaginary journey now at an end leaves in the mind differs radically from that presented by most real museums. It is not that of an institution where things too precious to throw away have little by little been gathered and are now preserved in more or less haphazard fashion for such pilgrims as may come to worship them. The present plans speak everywhere of a resolute purpose to make the most in every way and for every one of everything the building may come to contain. We may regret the passive ideal, and wonder whether after all it may not bear richer fruit: but the active ideal is still untried, and it is too soon as yet to draw the comparison.

GLARE IN MUSEUM GALLERIES

THE PSYCHOLOGICAL FACTOR IN THE LIGHTING PROBLEM¹
ATTIC LIGHT VERSUS SIDE OR TOP LIGHT

In the present day of voluminous scientific publication there is risk in claiming that any large factor in an important question has hitherto mainly escaped consideration. In regard to the problem of the lighting of buildings, whether artificially or naturally, the claim has nevertheless just been made from the standpoint of the lighting engineer; and it is substantiated from the standpoint of the museum official. Professor Ferree writes: "Up to the present time the work on the problem of lighting has been confined almost entirely to the source of light. The goal of the lighting engineer has been to get the maximum output of light for a given expenditure of energy. Until recent years little attention has been given to the problem in its relation to the eye."2 In like manner the goal of the museum architect has been to get the maximum of light upon walls and cases within general limits of construction. This is the end principally sought by Professor Magnus and Professor Tiede, whose rules have been the chief contributions of the past generation to the theory of lighting picture galleries; and the same direction of inquiry has been followed in the demonstration of lines of equal illumination in a picture zone given by Professor Wagner.³ To the problem of museum lighting

¹ Reprinted from the Architectural Record (New York), August and September, 1915.

² "The Problem of Lighting in its Relation to the Efficiency of the Eye." Paper read before the American Philosophical Society of Philadelphia, April 4, 1913. Science, July 17, 1914 (N.S.), vol. xL, no. 1020.

³ Durm's Handbuch der Architektur, vol. IV, 6, 4 (Leipzig, 1893), p. 223 f.

in its relation to the eye but incidental attention has been devoted.

Yet in museums the psychological element is more than half of the problem of lighting. Sight is a function of two variables: the illumination of the object, and the condition of the organ; and two everyday facts indicate that the latter is the more important factor for the delicate seeing which museum visiting involves. First: it is well known that visual discrimination is at its best under a moderate intensity of light. As an object is more and more brilliantly illuminated, our power of seizing its details diminishes. The device called the Claude Lorraine glass aims to bring out the beauty of a landscape by reflecting it in a mirror constructed to tone down its brightness. Second: exposure to brilliant light dulls the eve at the time and afterward for objects moderately illuminated. A white picket fence in the sun is an effective screen to objects which otherwise would be discernible through it; and on going outdoors at night we do not at once see so well as later.

From these two facts the inference is that light openings of almost any dimensions customary in other buildings would suffice for museum purposes, if only the openings themselves and reflections from them were kept out of sight of the visitor, as they are not in other buildings. The more important consideration is not the size of the sources of light, but their position. The crux of the problem lies in protection from glare.

Two positions have hitherto been mainly chosen: that of ordinary windows, giving what is called "side light"; and that of openings in the ceiling and roof, giving "top light." Of the first two buildings planned in Europe expressly for museum purposes, one, the Old Museum in Berlin (1824–28), was lighted only by windows; the other,

the Old Pinacothek in Munich (1826-36), chiefly by ceiling lights. This method was one of two architectural novelties embodied in the Old Pinacothek, the other being its arrangement of rooms along a corridor. The choice of top light for the main galleries is said to have been dictated by the belief that Greek temples were hypethral, that is, open to the sky; from which it was inferred that Greek taste demanded to see works of art under light from above. It has since become doubtful whether Greek temples were ever hypethral by intention; and the method of their lighting is now admittedly a puzzle. But in spite of the weakening of the classical argument for top light in galleries of art, strong reasons, chiefly those of economy in space, have maintained it as the standard lighting. With top light, all four walls of a room may be used for exhibition; and however large the area of a building, it can all be covered by a one-story construction, within a perimeter carried higher.

In a high building, the lower stories are necessarily lighted by windows; and in museums of science, which are commonly of several stories, side light is apt to predominate. It has also always been used in museums of art for smaller galleries, or cabinets, designed for objects demanding close inspection.

Judged by the canon here adopted — the avoidance of glare — both systems of lighting leave much to be desired for museum purposes. Under top light, the visitor's eyes are subjected to more or less glare from five sources. These are (1) direct glare from the ceiling opening — conspicuous in long galleries; (2) indirect glare (a) from below — conspicuous as the image of the ceiling opening in desk cases; (b) from above — conspicuous as a shimmer on canvases hung high; (c) from in front — conspicuous as the image of the visitor himself on the glass of

upright cases and low hung pictures; (3) indirect glare from sun spots, or the areas directly lighted by the sun through the ceiling light.¹ Dr. Koetschau lately called top light "a necessary evil" ² and Mr. Seager flatly declares "the principle of having a top or ceiling light is wrong." ³

With side light there is an oppressive glare from the windows, and dazzling reflections on canvases or cases opposite. Of "the accepted idea of a natural history museum, namely, of halls about sixty-five feet wide, lighted on each side, the windows being as large and the rooms as long and as unimpeded as possible," Mr. C. C. Brewer writes:

If a person passes along one of these rooms and notes carefully what he has seen or can see from the central aisle, he will find that with desk or table cases he has noticed an enormous area of reflections on glass, and a certain number of small dark objects through the glass. If the room is filled with larger cases of mammals, etc., he has again seen a great many reflections, and in addition the silhouettes of many animals and occasionally the side of some, really almost well lighted. It may be that the visitor is really bent on examining the exhibits, and industriously examines the cases in two or three rooms about two hundred feet long, by which time, having been occupied in dodging reflections, he is weary, and walks hurriedly up the centre aisle of the remaining rooms, gaining nothing thereby but additional fatigue.⁴

Most museum visitors will be able to corroborate much of Mr. Brewer's account from their own experience. In fact, the normal use of a museum gallery may be said to forbid without appeal the use of low windows — that is, openings in the wall proper — as sources of light. A museum gallery is a place where people are to move about

¹ Amusing examples of the reflections of light openings on desk cases are given in the illustrations, pp. 118-19 of *Museumskunde*, vol. vii. (1911.)

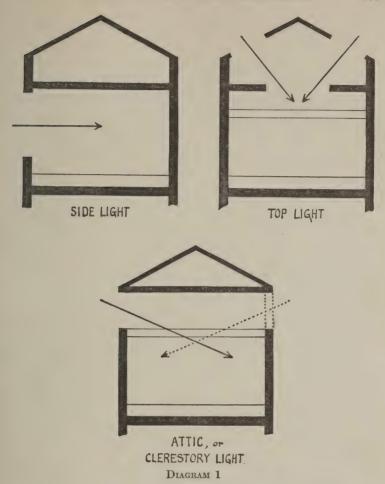
² Museumskunde, vol. vII (1911), p. 85.

³ S. H. Seager, "The Lighting of Picture Galleries and Museums." Journal of the Royal Institute of British Architects, vol. xx (1913), p. 44

⁴ C. C. Brewer, "American Museum Buildings," Journal of the Royal Institute of British Architects, vol. xx, no. 11 (April 12, 1913), p. 388.

inspecting its contents. In this purpose it differs radically from a living-room or an assembly hall, where people are to seat themselves or where seats are placed for them, out of the glare from the windows; and where seeing is not their only or their chief occupation. Every turn that directs a museum visitor toward the window wall of a side-lighted gallery exposes his eyes to a glare that for the time makes good seeing difficult if not impossible. To meet this difficulty it is recommended in the books that the window sill be placed not lower than the visitor's eves. Although soberly proposed, this remedy is patently ineffective. The range of vision with erect head extends sixty degrees above the horizontal, and a sill at the level of the eye cuts out only that glare which may come from below the horizon, from the ground or buildings. Glare from the sky remains, diminishing as the sill is raised to higher levels. At six feet, to cut off any disturbing view of the sky, the visitor must place himself within a few inches of the window wall; at seven feet, within a foot or two; and within greater but still impracticably small distances for any height of sill below the upper limit of his main vision as he walks about inspecting exhibits. In a room of moderate height this range covers at least all of the space below an appropriately placed cornice. Hence no light openings should be placed in the wall proper. The principle of the avoidance of glare demands the abandonment of side light in museum galleries in which the visitor is supposed to walk about. According to the Messrs. Papworth, "side lights are objectionable, except for rooms in which the chief pursuits are those of daily life, such as the apartments provided for the officers, servants, reading-rooms, etc." 1

¹ J. W. and W. Papworth, Museums, Libraries and Picture Galleries (London, 1853), p. 12.



At their extremes, top light is vertical and side light horizontal. One other direction is possible: a diagonal between the two. The light may come, not from the wall proper of the room, nor through the roof of the attic over it, but through the wall of the attic made a part of this room. By extending the attic above the roof of adjoining construction the method becomes a means of lighting interior spaces. The attic becomes a clerestory. This third possible solution of the problem of museum lighting

proposes that the sources of light should be windows, but windows with sills at or above the cornice of the room lighted. The three methods are compared in Diagram 1.

Under the name of "studio" or "atelier" lighting, the illumination of works of art from high windows is widely acknowledged as the ideal. The method conforms to the canon of Leonardo da Vinci that "the painter should work under a light in which the shadows of objects are equal to their height." Dr. Waagen advocated high side light for the Old Museum in Berlin because it was the illumination under which pictures were produced, and the best light to work by would be the best light for seeing.²

Professor Brücke mentions the frequent use of "socalled high side light" and gives reasons for its good success.³ Professor Wagner describes its advantages for pictures and adds:

The proper lighting for collections of works of art of every kind is the high side light from one side just recommended for picture galleries, especially when it comes in a northerly direction, as in ateliers. This method of introducing light offers most of the advantages of ceiling light without its disadvantages. It is particularly favorable when the light-opening, as in ateliers, can be continued above the wall, cutting into the roof and loft, or through the vaulting.⁴

Studio or atelier light in both the forms here called exterior and interior attic lighting is already illustrated in many museums and almost all instances are singled out for especial praise. True attic lighting — from penetrations in an exterior wall above a cornice — is provided in several galleries of the Vatican. The alcoves of the Belvedere (1770), the Sala a Croce Greca (1780) and the

¹ Libro della Pittura, cap. 85. ² Papworth, p. 69.

³ Ernst Brücke, Bruchstücke aus der Theorie der bildenden Künste (Leipzig, 1877), p. 175.

⁴ Durm's Handbuch der Architektur, vol. IV, 6, 4, p. 257.

Museo Chiaramonti (1810) all receive light from openings in vaulting; and by both Mr. Clipston Sturgis and Mr. Edmund M. Wheelwright of the Commission of Observation sent to Europe by the Museum of Fine Arts in Boston in 1904, the lighting of all is commended in varying measure. The porticoes of antique sculpture at the Naples Museum, which were apparently loggias when the building fulfilled its original purpose as a cavalry barrack (1587), receive a like and very advantageous light from windows high in the walled-up arches (1790). An adaptation of attic light to special conditions of reconstruction was adopted by Professor Treu (1891) for the principal galleries of casts at the Albertinum in Dresden. Here an interior room receives its light from the roof through an opening on one side of a vaulted ceiling. Professor Treu found the results notably satisfactory. Both the dazzling of the visitor's eyes produced by lower light and the unrelieved shadows in the sculpture produced by light from overhead were avoided.² Mr. Brewer found Blackstone Hall in the Chicago Art Institute, lighted from windows on one side at fifteen feet from the floor, "one of the best lit that I saw."3

To most people the Sistine Chapel (built in 1473; 157 feet long, 52 wide, 59 high) is rather a museum gallery than a church; and it is not impossible that the architect had in mind the effect of the paintings filling the lower part of its walls. The lighting is by clerestory windows running above a gallery at some thirty-five feet from the floor; and has been called by competent observers the most beautiful light for pictures they had ever seen. Sev-

¹ Museum of Fine Arts, Boston, Communications to the Trustees, vol. III (Boston, 1905), p. 35.

² G. Treu, "Die Sammlung der Abgüsse im Albertinum zu Dresden," Archaeologischer Anzeiger: Beiblatt zum Jahrbuch des Archaeologischen Instituts, vol. 1. (1891.)

³ Brewer, p. 381.

eral buildings erected expressly for museum purposes contain halls lighted from a clerestory. The west range of the Smithsonian Institution building at Washington (1847-55), consisting of a nave with clerestory and aisles. one lighted by windows, was originally planned as a reading-room, but since 1866 has been used for collections of natural history. The main hall of the Kelvingrove Museum at Glasgow (built 1893-1901; 137 feet long, 62 wide, 88 high) is another example. Sir W. Armstrong has called the ground floor plan of this museum "more successful than anything else of the same kind in Europe." The gallery containing the zoölogical collection of the museum at Perth, West Australia (1895), is reported as "admirably lighted by clerestory windows." 1 The central "Basilica" of the Kaiser Friedrich Museum in Berlin (1898–1904) receives its light from a clerestory. At the Museum of Fine Arts in Boston, the Tapestry Gallery in the new Evans Building is admirably lighted from windows on both sides above a cornice twenty-seven feet from the floor. Of the central hall of the Decorative Arts Wing of the Metropolitan Museum of Art in New York (1910), which is also lighted by clerestory windows, Mr. Brewer writes: "If only this clerestory lighting could be adapted to lower rooms, we should probably arrive somewhere near to the ideal of a perfect picture gallery."2

¹ Museums Journal, vol. III, no. 6 (December, 1903), p. 179.

Since the publication of the present essay in the Architectural Record, Dr. Karl Koetschau has described in Museumskunde (vol. xi, 1915, p. 134 f.) a museum plan based on obtaining high side light from inclined windows. A patent for the scheme has been applied for by the author, the architect, Peter Birkenholz, of Munich and Switzerland. High side lighting from inclined windows

² Brewer, p. 379. The lighting in the Rotunda of the National Museum at Washington from lunettes at sixty-two feet from the floor and a central skylight in the dome at one hundred and twenty-five feet is compared favorably by Mr. Brewer with that in other rooms. "The Rotunda is much more restfully though amply lighted, but it seemed the central skylight might even here have been omitted to advantage" (p. 392).

These approving judgments upon the general method of introducing light above a cornice, and upon individual galleries, may be taken to refer chiefly to the effect of this illumination in bringing out the character of objects. It remains to go further into the question of the comparative merits of top light and attic light in the matter of the avoidance of glare in the eyes of spectators.

In Diagrams 3 to 17 four galleries are compared, three top-lighted and one attic-lighted. All are supposed thirtyfour feet square. Square galleries are chosen because they present the best conditions in respect to glare under both systems of lighting. For attic light, oblong galleries are somewhat inferior, and for top light markedly so. The attic-lighted gallery has a height equal to its other dimensions, with a cornice at twenty-one feet from the floor. This is the average height of the picture zone in fourteen galleries tabulated by Professor Wagner.¹ The window above is eleven feet high and thirteen feet broad. in the centre of the attic wall and reaching to the ceiling. The height of one of the top-lighted galleries — twentyfour feet — is to its other dimensions approximately in the proportion recommended by Magnus, namely, 7.85 to 11, or nearly 5 to 7. This, or a smaller ratio, is not infrequent in American galleries. The height of the second, twenty-eight feet, approximately illustrates the proportion recommended by Tiede, namely, 75 to 91, or nearly 5 to 6.2 The third is a cube like the attic-lighted gallery, according to the rule stated to Professor Wagner by Mr. R. Redgrave, formerly of the South Ken-

is also the proposal of Arthur Deane whose article on "The Accepted Design for the Belfast Municipal Art Gallery and Museum" (Museums Journal, September, 1914, vol. XIV, no. 3, p. 95) contains critical remarks about the top-lighting of pictures and proposes an adaptation of weaving-shed construction.

¹ Durm's Handbuch der Architektur, vol. IV, 6, 4, p. 237.

² In the first building of the Museum of Fine Arts in Boston the lower picture galleries were twenty-four feet high, the higher twenty-eight.

sington Museum. Mr. Redgrave's opinion was that the height of a gallery to the ceiling light should be equal to its width; this proportion avoiding reflections, if the width of the light is one half that of the gallery. This is the width here adopted for the ceiling light (Magnus one third, Tiede one half, Weissman independently one half; in practice often greater), its area being one quarter that of the floor of the room. In the group of galleries cited by Professor Wagner, the relative area varies from seventeen to fifty per cent. As the larger the ceiling light the greater the glare from it, a low mean between these extremes presents the case favorably for top light.

Although the area of the window is but an eighth the floor area of the room, it would appear that the illumination from it would be not far from equal to that from the ceiling light. The restriction of the glazing of the roof to the slopes, as shown in Diagram 1, now very generally recognized as essential to good top-lighting, materially cuts down the area of the ceiling light through which light in any part of the room is received from the sky. Moreover, light from a ceiling opening passes through two layers of glass, losing forty per cent in the process, according to the estimate recorded by Professor Wagner, and from the window through but one.4 Space for another window of half the breadth of the central one and on either side of it is indicated in the panelling of the attic shown in the diagrams; but experience goes to prove that the increase would very seldom indeed be needed. According to Professor Wagner, the painter Kaulbach and others found the gallery constructed on Professor Tiede's meas-

¹ Durm's Handbuch der Architektur, vol. IV, 6, 4, p. 237.

4 Idem, p. 238.

² A. W. Weissman, "Gallery Building, Journal of the Royal Institute of British Architects, vol. xiv (3d series), 3d quarterly part, nos. 11-15. (1907.)

³ Durm's Handbuch der Architektur, vol. IV, 6, 4, p. 237.

urements at times almost too much lighted. In the large top-lighted galleries of the Brera at Milan the light comes through one layer of glass, there being no ceiling light. The area of the opening in three of the galleries is but a sixteenth the floor area of the room; yet Mr. Sturgis remarks: "Seen under average (not really dark) winter conditions, there is apparently ample light at all times." ²

For convenience of inspection, the results under given conditions for all four galleries are presented at once in Diagrams 5 to 7. No account is taken of the arrangement of the skylights in the roof. Were the opaque zenith shown in Diagram 1 provided, it would cut out a portion of the patches of glare indicated in the diagrams, leaving a strip on one or other or both edges.

Semi-transparent diffusing curtains or screens capable of being drawn over light openings to exclude direct sun are a necessity of any system of museum lighting. With top light these are horizontal or inclined, and are generally placed and controlled in the loft above the gallery. With a window they are hung perpendicularly like domestic curtains, and may be controlled from the room. The difference in convenience in favor of window curtains, due to the inaccessibility and exposure to dust of skylight curtains, can hardly be appreciated by any one who has not to do with museum housekeeping.3

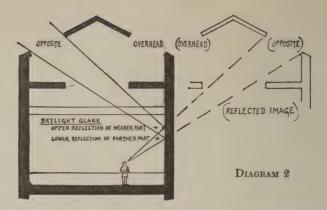
The method of determining the boundaries of the reflections from the light openings is illustrated in Diagram 2. The angle of reflection being equal to the angle of inci-

¹ Durm's Handbuch der Architektur, vol. IV, 6, 4, p. 229.

² Museum of Fine Arts, Boston, Communications to the Trustees, vol. III; The Museum Commission in Europe (Boston, 1905), p. 26.

³ In the side-lighted room especially built at the Ryksmuseum at Amsterdam for Rembrandt's Night Watch, curtains of tracing linen are hung before the

window. Report of the Royal Dutch Commission, quoted in Communications to the Trustees of the Museum of Fine Arts, Boston, vol. II (December, 1904), p. 60.



dence, the image of an object before a plane mirror is at the same distance behind it, of the same magnitude, and equally inclined to it; in other words, is the symmetric counterpart of the object.¹ The study of reflections is not without its difficulties, and the diagram is here introduced to make the matter plain. A puzzling passage in a recent essay by a well-known museum architect reads: "If the dark space around the ceiling is five feet wide, only the roof openings opposite can light the picture, and the light from the openings on the same side, which causes the annoying glimmering of the picture surfaces, is completely shut out." The diagram shows that the lower and more obtrusive part of the glare on a canvas from a ceiling light is due to rays from the opposite, not the over-

¹ It is noteworthy that Dante states the law of reflection as exactly as it could be stated by a physicist:

"Come quando dall' acqua o dallo specchio Salta lo raggio all' opposta parte Salendo su per lo modo parecchio A quel che scende, e tanto si diparte Dal cader della pietra in egual tratta Si come mostra esperienza ed arte."

Purgatorio, xv, 16-21.

[&]quot;When a ray leaps up in the opposite direction from water or a mirror, it rises in the same way that it falls, departing just as much from the line of a falling body (the perpendicular) within the same space, as observation and theory show."

head opening. Mr. Sturgis remarks that at the Thomy Thiéry Gallery of the Louvre it was sought to exclude the influence of the opposite top light by opening the ceiling directly on the pictures instead of at the centre, but without any marked success. "Clearly the preponderance of light came from the opening opposite and not from that directly above." "The freedom from reflections on the pictures was due to the fact that they were hung low and not to the fact that light was directly over them." 1

In the present comparison between top light and attic light in the matter of glare the five sources already mentioned will be considered in order.

(1) The comparison for direct glare is indicated in the

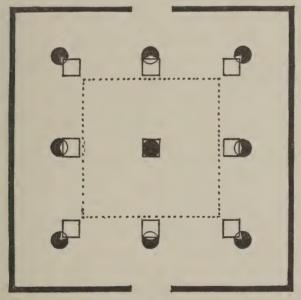


DIAGRAM 3. TOP LIGHT

black circles of Diagram 3 representing the top-lighted gallery thirty-four feet in height, and of Diagram 4 rep-

¹ Museum of Fine Arts, Boston, Communications to the Trustees, vol. III, The Museum Commission in Europe (Boston, 1905), p. 28.

resenting the attic-lighted gallery of the same height. The highest top-lighted gallery is chosen because it presents the case for top light most favorably. The height of the visitor's eye is taken throughout the diagrams at five feet. In Diagrams 3 and 4 the floor is divided into nine equal sections, and the visitor is supposed to be at the centre of each.

The white sectors represent the horizontal angle subtended by the ceiling light or window, and indicate how far the visitor must turn from the wall before beginning to receive direct glare from the source of light. In the top-lighted rooms there would be a space in the centre, in which the ceiling light would be entirely out of the maximum range of vision with erect head — about sixty degrees altitude — in whatever direction the glance was turned. This area would vary from about a ninth of the floor area of the thirty-four-foot gallery, to an inconsiderable fraction of the twenty-four-foot gallery. Elsewhere in the thirty-four-foot top-lighted gallery the vertical angle subtended by the ceiling light increases to a maximum, at the walls, of about half the horizontal angle. In the attic-lighted gallery, the window would be concealed in like manner by the brow of a visitor standing at any point within about a third of the area of the room — that nearest the window wall — and would be above the ordinary range of convenient seeing at all practicable points. In this gallery the vertical angle subtended by the window is about three quarters the horizontal angle in the outer positions indicated, and about half in the central positions.

These various conditions express the general fact that from the floor of a room an area central on the ceiling is seen either wholly without foreshortening (at the centre) or somewhat foreshortened (at the walls); while an area at the top of a wall is either seen equally foreshortened (at the opposite wall) or is entirely invisible by foreshortening (at the window wall). One point favors top light. The ceiling light would at no point descend so low—

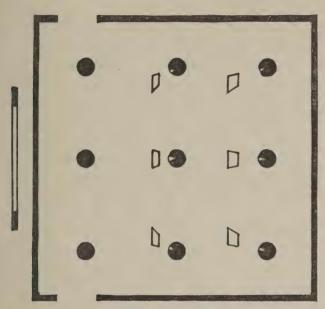


DIAGRAM 4. ATTIC LIGHT

about thirty degrees — into the maximum field of vision as would the window seen from near the opposite wall, although nearly as low in a twenty-four-foot gallery seen from one corner. Three points favor attic light. The area totally exempt from direct glare is much larger. Moreover, the sectors show that the visitor has a larger freedom of turning without exposure to direct glare. Finally, the exempt area in a top-lighted gallery being in the centre, no position of the doorway will spare the visitor direct glare from the source of light on entering; while in an attic-lighted room the doorway may be placed in the exempt area — that is, near the window wall — as

shown in Diagram 4, so that the visitor may begin the inspection of the room undazzled. On the whole, the comparison in the matter of direct glare may be taken to incline noticeably, though not decisively, in favor of attic light.

(2a) The rectangles in Diagram 3 and the trapezoids in Diagram 4 represent the reflection of the ceiling light and the window on the floor of the gallery. These reflections change in position and more or less in shape for every change in the standpoint of the observer. The reflection of the ceiling light is much the larger, both on account of its larger source and its shorter path, and would be larger still in the twenty-eight and twenty-fourfoot galleries. Further, it is more or less directly beneath the visitor's eyes, instead of several feet away, as in the attic-lighted room. The disturbance from this source is negligible where, as in most galleries, the floor is covered with some dark, non-reflecting material; but the position of the figures reveals the cause of one of the most common complaints against top light in museums. Drawn somewhat closer to the visitor's position and made somewhat smaller, the rectangles and trapezoids would represent also the reflections from the surfaces of horizontal glass cases: so-called desk, or table cases. Diagram 3 shows that with top light these reflections would lie upon the glass almost or quite directly over the object looked at, effectively concealing it except in so far as the visitor's head and body intervene. With attic light they would never lie under the visitor's eyes, but always on one side, from a few feet away when large to a few inches when small, in the direction toward the window, either diagonally in front or on either hand. The diagram makes

¹ S. H. Seager, p. 52. "The most annoying effect of all is perhaps to be seen when horizontal glass specimen cases are placed in a strongly top-lighted room."

plain the imperative need of window light for desk cases that every one has felt who has ever sought to make out their contents under light from the ceiling. In the matter of reflections from below, the comparison results decisively in favor of the attic light.

(2b) Diagrams 5 to 7 represent reflections on the walls of the four galleries, and on canvases hung perpendicularly, as seen from different standpoints on the floor, and indicate also what the reflections would be from the glass of cases. These reflections fall lower as the observer approaches the reflecting surface and rise higher as he recedes from it.

From incidental references in the books and from experience, it may be assumed that the most restful seeing demands that a line drawn from the eye to the top of the object should form with the horizontal an angle not greater than about thirty degrees. Professor Magnus placed the top of a picture zone in a gallery thirty-six feet (11 m.) wide at nineteen feet (5.95 m.) from the floor; and Professor Tiede, in a gallery thirty feet (9.1 m.) wide, at eighteen feet (5.65 m.). The latter remarks that this height requires only a moderate raising of the glance.1 Professor Treu recommends about this height (5.5. m.) for the cornice of a sculpture gallery.2 From the centre of either the Magnus or the Tiede Gallery, eighteen or fifteen feet from the wall, the angle to the top of the picture zone would be about forty degrees; but taking Mr. Papworth's opinion that the largest pictures should not be seen at a less distance than twenty-five feet, or approximately three quarters across either gallery, the angle would reduce to about thirty degrees.3 According to this criterion, to see

¹ A. Tiede, "Museumsbaukunde," Abschnitt I from the Baukunde des Architekten, Band II, Theil 2 (Berlin, 1898), p. 73.

² G. Treu, Die Sammlung der Abgüsse im Albertinum zu Dresden." (1891.)

³ Papworth, p. 54.

an object reaching to six feet from the floor — for example, a picture three feet high hung over a baseboard, or dado, of the same height — the spectator might stand as near as three feet, a distance which may be regarded as the limit of approach, except for the scrutiny of particular features. If the top of the object reached to eight feet from the floor — for example, a picture five feet in height — seven or eight feet would be the limit of approach. If to fifteen feet — for example, a picture twelve feet high — the limit would be eighteen feet. If to twenty feet, the limit would be twenty-five feet.

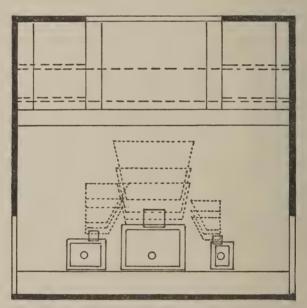


DIAGRAM 5. OPPOSITE WALL; FROM NEAR BY

Pictures reaching to approximately these heights are shown in Diagrams 5 to 7, seen from approximately these distances. Diagram 5 shows by dotted lines the reflections of the ceiling lights in the three top-lighted galleries, on any wall, and by full lines the reflections of the window

in the attic-lighted room on the opposite wall, as they would appear to a spectator three, four, and eight feet away. Under the reflections on the right, seen at three feet away, the Mona Lisa (31 inches high, 20 inches broad, or .77 m. by .53 m.) is hung. Under the reflections on the left, seen at four feet, the picture is The Fighting Téméraire of Turner ($35\frac{1}{2}$ inches high by $47\frac{1}{2}$ inches broad). The central picture seen at eight feet away is The Entombment by Titian, at the Louvre (4 feet 10 inches high, by 7 feet broad; or 1.48 m. by 2.15 m.). The reflections from the window are above the canvases, and those from the ceiling lights are at greater or less distances above the frames.

It proves on investigation that larger pictures would not escape reflections from a window opposite unless the spectator were to place himself beyond the best distance for seeing. The case is otherwise for the ceiling lights represented. The limit of height to which a canvas could be raised without receiving reflections from above, supposing the spectator to retreat until he saw the top at an angle of thirty degrees — that is, within the best seeing range — would, for the twenty-four-foot light, be nine feet six inches from the floor, the distance being eight feet; for the twenty-eight-foot light, thirteen feet, the distance being fourteen feet; and for the thirty-fourfoot light, nineteen feet, the distance being twenty-five feet. Supposing nineteen feet to be about the height of the picture zone, this last result confirms Mr. Redgrave's assertion that in a top-lighted gallery as high as it is broad, and with a ceiling light half its breadth, there are no reflections on the pictures; supposing, it must be added, that the spectator always views them at the distances at which they can most comfortably be seen as wholes.

The establishment of a limit of five feet in height, or eight from the floor, for pictures shown on the opposite wall of the attic-lighted room, is a point against attic light to be regarded as more than counterbalancing the very much larger area on the wall occupied by the glare from the ceiling light. Yet measurements of two hundred pictures taken at random from the chief galleries in Europe and America indicate that two thirds of museum pictures are below five feet in height. Under the attic light proposed the opposite wall is hence suitable not alone for small pictures, but for a large majority of all pictures. Dr. Salin is reported to have said that objects over eight feet from the floor cannot be looked at for any length of time without undue fatigue.1 The remark doubtless referred chiefly to case objects; but it has its application also to pictures. It should not be forgotten further that the whole upper part of this opposite wall would be a superb position in which to show tapestries or any other objects, artistic or scientific, which were devoid of sheen. The pictures or other objects shown below would also possess an éclat of coloring unknown in top-lighted galleries.

The tilting of a canvas raises the reflections upon it, and is the expedient customarily resorted to when sheen upon it is burdensome. These diagrams do not take into account any inclination of the canvases from the perpendicular, both because the practicable amount is uncertain, and because the larger the picture the more undignified does any considerable tilting become. It may be recalled that in the Vatican Gallery large pictures opposite low side light are placed on hinges, and the visitor who wishes to see them exempt from all glare is free to move

¹ Martin Mayer, "Betrachtung eines Bautechnikers über die Einrichtung von Schausammlungen," *Museumskunde*, vol. vr (1910), p. 161.

them as he pleases. This method has the advantage over tipping that it is perfectly effective and may be used with the largest canvases without interfering with the stateliness of their effect. The Sistine Madonna is permanently installed at an angle to the window lighting it.

On cases, when seen as is customary from perhaps three feet away, the reflection from the attic light opposite would still fall eighteen inches above the observer's eyes; and were he to stand off to double that distance or beyond, it would fall wholly above a case of the usual height of seven feet six inches or eight feet.

On the whole, the comparison for reflections on the opposite wall may be said to result unfavorably to attic light, although under the conditions here proposed its handicap would in all probability seldom or never be noticed, the freedom of installation it allows being in general amply sufficient.

A square attic-lighted room differs from a square top-lighted gallery in that the conditions of illumination differ from wall to wall. In the top-lighted gallery they are identical. Their different lighting from a window is a point of signal advantage in museum economy. Objects belonging in the same gallery on account of their similarity of origin or nature are never of the same rank or importance, nor are they all seen at their best under identical conditions of illumination. The managers of exhibitions of art in particular willingly acknowledge that opportunities to keep some objects back, put others forward, and otherwise to adapt their lighting to their character, are most welcome.

A comparison of the identical conditions present on the transverse walls of the three top-lighted galleries with the changed conditions on those of the attic-lighted room results decisively in favor of attic light, as Diagrams 6 and 7 show. Diagram 6 represents the reflections on a transverse wall as they would appear to a spectator seated at the centre of the gallery, in a position to inspect at leisure its most important exhibits. It is to be noted that when seated in this position in the attic-lighted gal-

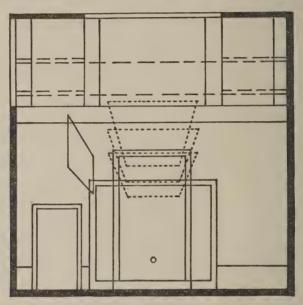


DIAGRAM 6. TRANSVERSE WALL; FROM CENTRE OF GALLERY

lery the visitor would be unable to see any of the window in the next gallery, and would have in view only its least illuminated wall. The broader picture indicated is the Night Watch of Rembrandt (11 feet 9 inches high; 14 feet 3 inches broad; or 3.59 m. by 4.35 m.) installed with the canvas at a foot from the floor as it is now placed in the new room especially built for it at the Ryksmuseum at Amsterdam. For this new room dimensions have been chosen not far from those of the gallery here proposed. It is five feet narrower on the picture wall, and two feet deeper in front of the picture, and is lighted by a window

on the left, with a sill at about seven feet six inches from the floor. To an observer in the position indicated the twenty-four-foot ceiling light gives reflections on the canvas, but none of the other three sources. The higher picture represented is Giovanni Bellini's Madonna di San Giobbe at Venice (15 feet 3 inches high by 8 feet 3 inches broad; or 4.66 m. by 2.52 m.) installed likewise at a foot from the floor. The supposed observer's angle of vision to the top is about thirty-eight degrees. This inclination may be said to translate into museum terms the very much greater angle at which the painter planned the picture should be seen from its position on an altar. Here the attic light alone gives no reflection on the canvas. Even the thirty-four-foot top light covers the top of the picture with sheen, and the lower lights obliterate a good part of it. This result contravenes the often expressed opinion that overhead lighting is essential for large pictures, such as Italian altar pieces, side lighting being suitable only for small pictures. The truth appears to be more nearly the contrary. Window lighting is indispensable for the largest, as well as best for the smallest and those of moderate size. The superior convenience of top light is shown only in the case of a residue of large but not the largest dimensions.

The imperative necessity of window light for pictures reaching very high from the floor is emphasized in Diagram 7, representing the reflection from ceiling lights and window on the transverse wall, as seen from a position three quarters across the gallery, or about twenty-five feet from the wall. From this point the top of the upper canvas represented makes the normal angle of thirty degrees with the horizontal. The picture is a Boar Hunt by Snyders, in the Louvre (7 feet 6 inches high by 11 feet 6 inches wide; or 2.32 m. by 3.48 m.). The picture below

is Boucher's Venus and Vulcan (6 feet 9 inches high by 5 feet 6 inches wide; or 2.05 m. by 1.70 m.) also in the Louvre. All of the ceiling reflections enter the upper picture, that from the thirty-four-foot light covering a minimal strip, and those from the twenty-eight and twenty-

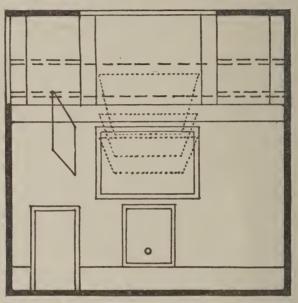


DIAGRAM 7. TRANSVERSE WALL; FROM THREE QUARTERS ACROSS GALLERY

four-foot lights masking the picture more or less completely. Under the twenty-four-foot ceiling it would be impossible to see the picture free of glare even from the opposite wall. As before, the reflection from the window is wholly out of range of the canvas. In general, the comparison indicates that on the transverse wall a picture in any part of the zone would be free of any reflection from the window when seen from an appropriate position, while all the upper half of the zone seen from appropriate positions is exposed to reflections from some or all of the ceiling lights.

In the top-lighted galleries these same conditions are repeated on the remaining wall of the room, that in which the window of the attic-lighted room is placed. In this room no light falls directly on the window wall, and there would hence be no reflections at all on it from the window. All its illumination comes indirectly from the interior of the room, and especially from the opposite attic wall, which receives the light of widest angle from the window. In this particular, attic lighting differs radically and for the good from either top or side lighting. Under top light, the objects most strongly illuminated are the floor and the visitors upon it; under side light, the opposite exhibition wall and the objects and visitors it strikes on the way. With an attic window the light of widest angle is received where it can be put to the best use. The attic wall is not used for exhibition, and being above the visitor's normal range of vision — that is, thirty degrees of altitude — in all practicable parts of the gallery, may be given the reflecting surface which will best diffuse light through the room. Attic lighting offers a favorable opportunity for the use of indirect illumination from a reflecting surface, whose present neglect after its successful employment by old Italian architects has been lately regretted by Mr. Hedley.1

A window wall is commonly deemed wholly useless for exhibition purposes, and the resulting loss of exhibition space is one of the chief objections made to lighting museum galleries by windows. It is to be admitted that the objection holds against side light, since in this case the wall and the window in it are within the range of vision together. But the simple experiment of screening the eyes from the window and the floor before it, as well

¹ C. Hedley, Report on Museum Administration in the United States, Australian Museum, Sydney, Miscellaneous Series, vol. viii (Sydney, 1913), p. 31.

as may be, with any object held in the hand, offers convincing proof that it is not wholly and may not be mainly the lack of sufficient illumination on a window wall that makes objects invisible on it, but the deadened condition of the sight produced by dazzling from the window. This deadened condition is forestalled in the attic-lighted room here proposed. The visitor would enter the room with his eyes protected from any glare from the light source, and thereafter would continue to be protected from it. Moreover, the window wall would be lighted up by diffusion from a surface above the ordinary range of vision - namely, the highly illuminated and light colored attic — as it never is in a side-lighted gallery. It is to be fairly expected that under these circumstances the "seeing" on the window wall would compare well with that in other parts of the room. Both observation and experiment in this direction are very greatly to be desired. 1

The total result of the comparison for reflections of the sources of light on pictures or upright cases bears strongly in favor of attic light. Only the transverse walls of the attic-lighted room offer high objects complete exemption from such reflections. Its window wall and opposite wall afford all needed freedom of installation; exempt from glare in the one instance for objects of the prevailing height, and in the other at all heights for the objects of minor importance of which every gallery has its share.

(2c) The comparison for reflections from brightly lighted objects within the gallery, including the visitor himself—or, as they may be called, mediate reflections—again favors attic light. The result in this case is decisive, owing to the difference just noted between the areas of maximum.

¹ Mr. Papworth remarks: "The reason that many galleries fail of success is that they are overlighted; and few persons comprehend this defect" (p. 74).

mal illumination under the two systems. In looking at a museum object through glass a more or less visible image of a fragment of the scene before the glass overlies the object. The mass of light reflected from the glass and forming the image comes to the eye from that fragment of the room and its contents seen in the image; while the mass of light reflected from the object and revealing it

comes to the eye in general from other parts as well. What can be seen on the glass over the object differs from what could be seen through the glass from the object. This appears in Diagram 8. But since glass reflects a larger percentage of light than objects do,¹ unless some part of the room visible through the glass from the

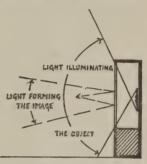


DIAGRAM 8

object is more intensely lighted than that fragment of it seen on the glass over the object, the image will tend to confuse the view of the object. Speaking broadly, the image must not include the most brilliantly lighted part of the room. This condition is fulfilled in the attic-lighted room and violated in the top-lighted galleries. For the image in both alike will consist mainly of the lower walls of the room, with the floor and the objects on it, including the visitor himself. Under attic light this is less brilliantly lighted than the upper part of the room; under ceiling light more brilliantly lighted. Hence under attic light the image will tend to leave undisturbed the normal view of the object: under ceiling light to obscure it. The ceiling-lighted image will efface the object because more strongly lighted; the attic-lighted object will overpower the image, likewise, because more strongly lighted. In the matter of

¹ Martin Mayer, Museumskunde, vol. vi (1910), p. 162.

reflections from upright glass the argument stands as decisively in favor of attic light as it stood for reflections from the horizontal glass of desk cases.¹

- (3) The evidence favors attic light again in the final point—that of glare coming from sun spots, or the spaces on floors and walls directly lit up by the sun. The tempering of direct sun by semi-transparent curtains is a necessity of any system of museum lighting; but without unduly darkening the room its effect can only be reduced without being wholly obviated. This effect takes the form of an inequality of illumination between the sunlit and the shaded wall such that the visitor may be hindered in seeing either well. Objects under the influence of direct sun dazzle him on turning from those dimly lighted; and the dimly lighted are difficult to see on turning from the
- ¹ On drawing the necessary lines in one of the diagrams, it appears that from no standpoint will the image of the room seen at or beyond the customary distance of three feet from glass seven feet six inches or eight feet in height show more than the lower fringe of the attic, or cove, below the normal altitude for the convenient inspection of objects, namely, thirty degrees; and for almost all standpoints no part of the attic will descend within that range; that is, the normal image will be almost wholly confined to that part of the room in which the illumination is not maximal.

The image of the room seen in very high reflecting surfaces will, under attic light, likewise include its most brilliantly lighted area — that is, the attic — and hence will become disturbing. But except on the opposite wall it will not include the source of light itself, as the image under ceiling light does on all four walls. Low side light alone excludes on high reflecting surfaces the image both of the source of light and of the area most brilliantly illuminated by it, namely, the opposite exhibition wall. But in turn, it brings either the source of light itself or its immediate reflection within the normal range of the visitor's vision in half the positions he can assume. In short, top light, having its maxima in the ceiling and the floor, gives mediate reflections on low reflecting surfaces, and immediate reflections on high reflecting surfaces. Side light, having its maxima on two opposite exhibition walls, gives neither on high surfaces, and immediate reflections on opposite low surfaces. Attic light, finally, having its maxima on two opposite walls above the exhibition range, gives neither on low surfaces and immediate reflections on opposite high surfaces. If the attic is made throughout a reflecting surface, as it should be, it adds mediate reflections on the remaining high surfaces. Since glass is the protection to objects within reach commonly found necessary in museums, and high objects are generally non-reflecting, attic light alone gives the exemption most needed, taking the whole exhibition wall into consideration.

brighter.¹ The decision of this final point between top and attic light must therefore turn on the question as to the amount of exposure of the exhibition walls of a gallery to sun spots under the two systems. The lighting which gives smaller wall spots for shorter periods will have the advantage. Diagrams 9 to 18 show as might be anticipated that the advantage remains with attic light.²

As before, no account is taken of the effect of the structure of the roof on the spots under top light, no uniformity of opinion existing as to the details of its best design. An opaque zenith is held a *sine qua non* of good top-lighting by most museum authorities at present, and would cut out a portion of the sun spots from top light, as it did of

¹ Professor Wagner remarks that the walls of a top-lighted gallery may be so unequally lighted that the pictures on the darker wall "are for the moment hardly discernible." Durm's *Handbuch der Architektur*, vol. IV, 6, 4, p. 238.

² The spots have been mapped out according to the following principles:

The path of a ray of light across a room will follow a straight line having a certain point of entrance into it, a certain direction through it and a certain point of contact within it.

Given the point of entrance and the direction, the point of contact may be found as follows:

The three pairs of parallel faces of which a rectangular room is composed, being the ceiling, floor, and walls, the point of entrance of sunlight may lie in any face but the floor. Its position will be determined by its perpendicular distance from any other two faces adjacent to this face and each other. The direction of the ray will be given by the compass point through which the plane of its projection upon the floor passes, called its bearing; and its altitude, or the angle it forms with the floor in the plane of that projection.

The projection of the ray upon the floor may be a point; in which case the point of entrance will be in the ceiling, the bearing of the ray will be indeterminate, its altitude will be a right angle, and the point of contact will be a point having the same position on the floor as the point of entrance in the ceiling.

Or, the projection of the ray upon the floor is a line; in which case the point of entrance may be in either the ceiling or the walls, and its bearing will be determined as the compass point of the plane of the projection. This plane will intersect one or both of the pairs of opposite walls.

If the intersection is with both the pairs of walls, the bearing will be a diagonal of the room, and the point of contact may be found by projecting on one of either pair of walls the figure formed by drawing from the point of entrance, in the plane of the bearing, a line forming with the floor an angle equal to the

In general, the intersection will be with one pair of walls only; in which case the point of contact will be found by projecting the same figure upon one of the other pair of walls.

the reflections from the ceiling opening. Again, those which are represented at the top of the walls in the diagrams might be less in size or entirely shut out, as more of the roof near the eaves were of solid construction.

The spots are represented as they would appear on the longest and the shortest days in the latitude of Boston; their approximate size and place at other times being deducible from these extremes. They are taken at 9 A.M., the usual opening hour of museums; at noon or other intermediate hours, and at the winter closing hour — four o'clock — and the summer closing hour — five o'clock. The intermediate hours show the sweep of the spots.

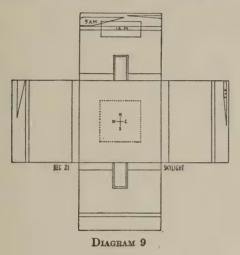
The galleries are represented seen from above, with the four walls laid out flat. All are supposed aligned with the cardinal points. As the ceiling light is square, and central in a square gallery, two diagrams, one for winter and one for summer, suffice for top light. The gallery shown is that with a ceiling light at twenty-eight feet, being a mean between the others. For the attic-lighted gallery, summer and winter diagrams are given with each direction of the window, north, south, east or west.

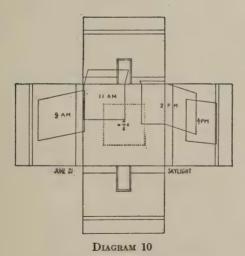
The diagrams show that under the ceiling light the spots occur every clear day, and continuously while the sun is high enough. With the attic window to the north, they do not occur at all, excepting for a short time just before the closing hour in midsummer. With the window to the south, they occur all day in winter, and until about three o'clock in summer. With the window to the east, they occur from the opening hour until noon, both summer and winter; and with the window to the west, from noon to the closing hour.

Taking all the four exposures together, they would appear for about half as long a time in attic-lighted galleries as in galleries top-lighted.

In size, the spots from the ceiling light are in these diagrams rather the larger; but if reduced by an opaque zenith they would be smaller.

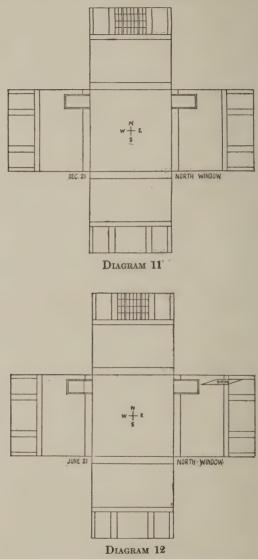
In position, the ceiling light spots in winter somewhat correspond to the window spots in summer, for the most part causing no inequality in lighting on the exhibition





SUN SPOTS FROM A SKYLIGHT

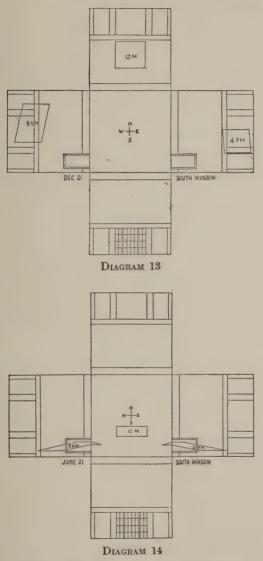
walls during these seasons respectively. The winter ceiling light spots are high on the exhibition walls or in the cove above, and the summer window spots either near



SUN SPOTS FROM A NORTH ATTIC WINDOW

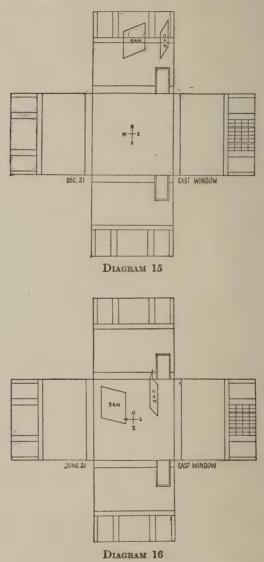
the doorways or on the floor, excepting in the west atticlighted room in the late afternoon.

As spring comes on, the spots from the ceiling light descend upon the walls, causing more and more inequality



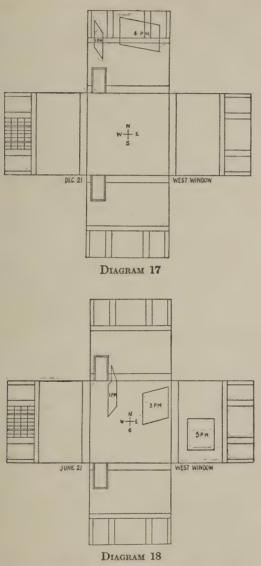
SUN SPOTS FROM A SOUTH ATTIC WINDOW

of lighting, until in midsummer the western wall is bathed in sunlight during the early morning hours, and the eastern wall nearly all the afternoon. According to the dia-



SUN SPOTS FROM AN EAST ATTIC WINDOW

grams the inequality of lighting has now become greater than in the attic-lighted room at any time. As autumn advances, the process reverses itself.



SUN SPOTS FROM A WEST ATTIC WINDOW

In the north attic-lighted room the walls would at all times be equally lighted. A patch too small to be of any effect would appear over the doorway just at the end of the day in summer.

In the southern and eastern attic-lighted rooms there would be some inequality of lighting in midwinter. But the spots are still for the most part in the attic or high on the walls, and as the season of stronger sun and clearer skies advances they begin to escape to the floor, the inequality diminishing until it disappears in midsummer; the process reversing itself in the fall. The total exemption of the north attic room from any disturbing inequality of lighting is balanced in a measure, though not wholly, by the exposure of the western room, especially in the late afternoon in summer. Toward spring or autumn the inequality would here become practically negligible.

On the whole, taking duration and place both into consideration, and allowing for the smaller spots under an opaque zenith, the diagrams indicate that the atticlighted rooms would suffer much less from inequality of lighting on the exhibition walls than the top-lighted galleries. Under the ceiling light, the sun spots would begin to invade exhibition space early in the spring and would remain there until late in the autumn, reaching their maximum when the sun's rays had most power. At this season only one of the attic-lighted rooms, that directed west, would be subject to disturbing spots, and that one only at the end of the museum day. In none of the rooms do any other disturbing spots appear, except in winter, when they would be for the most part innocuous. The winter exposure of a western side light coming at the end of the day instead of in its noontide glare has even been claimed as an advantage by the Boston experimenters.1

¹ Museum of Fine Arts, Boston, Communications to the Trustees, vol. IV; The Experimental Gallery (Boston, 1906), p. 25.

In this final point, attic light again proves markedly superior for museum purposes.

On all the five points here passed in review, embracing glare in all its varieties, the argument has gone one way. The psychological demand in the museum lighting problem proves to be met by attic light with a success that top light does not begin to equal.

On the architectural and practical side of the problem window lighting maintains a like superiority.1 Another side remains—the physical—relating to the second of the two factors in good lighting, namely, the proper illumination of the object. Here again attic lighting takes precedence. Professor Brücke stated the reason many years ago.2 While high light, like that from an attic window, best brings out the details of objects, as Leonardo said, beneath light from the ceiling the observer sees mainly the shadowed sides of any projections on an object above his eyes, whether these are the unevennesses in a canvas, a stuff or a solid object. Apart from possible sheen, a veil of greater or less obscurity therefore tends to overspread it. The difference becomes manifest, as weavers know, when the dulness of tapestries under top light is compared with their brilliancy under light from a window. The remedy, which was suggested by Professor Brücke, assuming top light retained, consisted in building an elevated footway through the gallery, supported on columns or otherwise, and reached by steps. From this footway the visitor would so overlook a large picture that the lighted and not the dark sides of its minute projections of pigment would be mainly visible.

Corresponding to this radical solution of the physical problem of top-lighting—that of color—an equally

¹ These matters are discussed in the preceding essay.

² Ernest Brücke, Bruchstücke aus der Theorie der bildenden Künste (Leipzig, 1877), p. 171 f.

radical solution of the psychological problem — that of glare - had already been carried out at the New Pinacothek at Munich in the Rottmann Gallery. Here the space assigned to the pictures was definitely divided off from the space assigned to the public by a row of columns supporting a solid roof, or velum, above which the light was admitted upon the picture wall, while the spectators remained in comparative darkness.1 A variation of the same device was proposed, apparently independently, by the Messrs. Papworth, whose ideal gallery contained a central space with a roof chiefly solid and either hung or resting on columns, light reaching the pictures from above it.2 The plan is nearly equivalent to the joining of two small attic-lighted galleries face to face by an intermediate covered passage — a scheme which was adopted in the Royal Glass Palace at Munich, with results which Professor Tiede calls "extraordinarily favorable"; 3 and in the Mappin Art Gallery at Sheffield, England (1886).4 Mr. Seager has just proposed the method anew under the name of "top side light."5

These two radical attempts to do justice to the two elements of the top-lighting problem may be called the only really important contributions to its solution which the century of the prevalence of top light in museums

³ A. Tiede, Museumsbaukunde (Berlin, 1898), p. 77.

⁴ E. T. Hall, "Art Museums and Picture Galleries," Journal of the Royal

Institute of British Architects, vol. XIX (1911-12), p. 402.

¹ Mr. Wheelwright remarks of this gallery: "Aside from the obstruction to view from the columns, the effect of this method of lighting is very undignified." Museum of Fine Arts, Boston, Communications to the Trustees, vol. III; The Museum Commission in Europe, p. 93.

² Papworth, p. 73, and Plates 9 and 10.

⁵ S. H. Seager, Journal of the Royal Institute of British Architects, vol. xx (1912–13), p. 51. Since the publication of the present essay in the Architectural Record, Mr. Edmund Anscombe, architect, writing from Dunedin, New Zealand, sends me drawings of his successful design for the Sargeant Art Gallery at Wanganui, New Zealand, in which the principle of "top side light" is to be used for the picture galleries, according to the stipulation of Mr. Seager, who was Assessor of the plans.

has brought forth. All the discussions since on other points — on the relation of the dimensions of the ceiling opening to the height and area of a gallery, on the lines of equal illumination in the picture zone, on the form of the roof, the quality of the glass, the methods of shading the skylight and cleaning the ceiling light — appear ineffective studies of detail in comparison. Yet each of these two devices — footway and solid velum — is in its own way a reductio ad absurdum of the effort to light museum objects from the top. Professor Brücke's suggestion of a footway seems to have met with no serious consideration in museums; and valuable as the plan of the solid velum proves in special instances, as a general solution of the difficulty of glare it seems equally inadmissible. The design of modern aquaria 1 shows that the plan has its essential sphere in museum arrangements; and it has been used to the general satisfaction in collections of natural history, and elsewhere, as at the Northern Museum in Stockholm. Diagram 19 represents the principles employed in these various devices for the reservation of light.2 By all of them the visitor's eves are shielded from direct glare from the light openings. Nevertheless, for a large share of the contents of all museums, whose adequate seeing demands the alternation of close with distant inspection, a screen reserving light for the objects alone may be set down as out of the question. If made a rule, the restriction of the visitor's free-

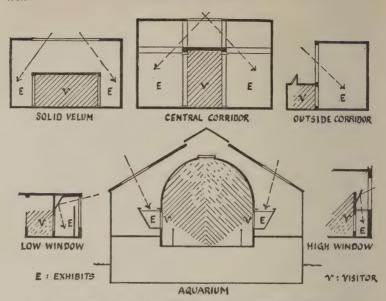
¹ Brewer, p. 396.

² M. Mayer, "Betrachtung eines Bautechnikers über die Einrichtung von Schausammlungen," Museumskunde, vol. vi (1910), p. 165. G. von Koch, "Die Zoologischen Sammlungen des Landes-Museums in

Darmstadt," 3, Museumskunde, vol. vi (1910), p. 92.

Edmund M. Wheelwright, Museum of Fine Arts, Boston, Communications to the Trustees, vol. III; The Museum Commission in Europe, p. 105 and Plate 76. Brewer, p. 389.

Dr. F. A. Bather, "The Northern Museum, Stockholm," Museumskunde, vol. iv (1903), p. 68.



METHODS OF RESERVING LIGHT FOR EXHIBITS.

DIAGRAM 19

dom of movement resulting from putting the public instead of the objects behind a barrier, as Herr von Koch has phrased it, would be intolerable.¹

The general problem of glare is not to be solved by attending to the augmentation or the reservation of light from an original source; but to its diffusion thereafter from all parts of the room not occupied by the objects and the public. Such a diffusion takes place under attic light, the whole area of maximal illumination above the cornice becoming its secondary source. This is evidenced by the success of clerestory lighting wherever employed; and in this use of balanced openings the principle of attic light promises also a solution of the problem of museum planning, as it will now be attempted to show.

¹ G. von Koch, Ueber Naturgeschichtliche Sammlungen. (Darmstadt, 1892.) Also Museumskunde, vol. vi (1910), p. 93.

THE NAVE PLAN VERSUS THE COURT PLAN

Of the two novelties of construction embodied by Von Klenze in the Old Pinacothek in Munich in 1826, one its top-lighting — the previous article has sought to prove a defect. The other — its corridor plan — the following pages will seek to prove a merit. As often happens, the defect was copied because it was easy to do so, and the merit dropped because it was difficult to do otherwise. In explaining his design, von Klenze stated his purpose to make it possible to reach the pictures of any school without passing through space devoted to those of any other. The unit of museum planning was not, according to this architect, an exhibition room, but an exhibition room with a passageway adjoining; the room in his plan being divided into two, one top-lighted as the chief gallery, and the other side-lighted for smaller pictures. This determination of the museum unit as a room plus a corridor recognized the basic nature of a structure devoted to permanent exhibition. A building through which people move to inspect any or all of certain classified contents demands freedom of direct communication between any two of its individual spaces.

The expansion of museums and of their office during the century since the planning of the Old Pinacothek has emphasized this demand for freedom of access in complicating it. The accumulations have emphasized it in leading to the frequent rearrangement of rooms. Their wider use has emphasized it in admitting the particular study of a single room by a class or audience under a leader or lecturer. Unless access to others can be had independently, the closing of a room for either purpose deprives visitors of the use of a whole suite. Again, their wider use has complicated the requirement of access in

assuming both in theory and practice a tripartite form. This was signified in 1870 for art museums in the words "Art, Education, Industry" on the seal of the Museum of Fine Arts in Boston, and was first formally stated for all museums in Dr. Bather's Presidential Address in 1903 as inspiration of the public as a whole, instruction of the interested, and investigation by the specialist. Corresponding to this triple division, the unit of museum planning has become an arrangement of three rooms with two intercommunicating corridors between.

There is one plan for a museum building which may be called the standard, in that no other one plan has been so often adopted: and by great good fortune its development in certain museums already expresses this triple unit. This plan provides exhibition space in two floors about two large areas open to the roof or the sky and separated by a structure used for entrance. In many museums the interior areas also are utilized for exhibition. In a number of museums, including one of the oldest buildings now used for museum purposes, the Naples Museum (1587), the external space consists of a double suite of rooms, inner and outer. Three museums lately built give the inner of the two secondary spaces the dimensions and use of a corridor, opening into the ground floor spaces on either side. These are the Art Institute in Chicago (1893), the Kelvingrove Museum in Glasgow (1901), and the Museum of Fine Arts in Boston (1909). This corridor variation of the standard plan, affording three kinds of space - the large interior areas and the upper and lower exterior rooms, with corridors between - offers a home for the modern triple unit. The corri-

F. A. Bather, Address as President of the Museums Association, Museums Journal (London), September, 1903, pp. 71 ff.
 As already noted in the previous essay.

dors are intercommunicating and the rooms on either hand may be assigned to diverse purposes.

In the three museums mentioned the two large interior areas are top lighted. Attic lighting, in its two forms exterior, one-sided, or attic lighting proper, and interior, two-sided, or clerestory lighting - suggests a further development of this scheme which in preserving its solution of the problem of access, satisfies, together with the demand for avoidance of glare, a third demand now widely current among all interested in museums: the demand, namely, for some means of making collections of overwhelming size available to the public as a whole. For the court, open or top lighted, may be substituted a nave, obtaining its light from clerestory windows above the outer rooms, and sharing it with the superposed corridors about it. This nave may be set apart for the public as a whole by devoting it to the exhibition of important objects and such as give a conspectus of the total contents of the museum. Being but a third of the total unit of the scheme, it may remain even in the largest museums no more extensive a space than can be visited on one occasion without confusion or fatigue. The lower floor of outer rooms may be given attic light and devoted to the exhibition of objects reserved for the study of interested persons; and the upper floor given side light and used for department offices and work-rooms by the specialists engaged at the museum and their guests. Doors into the corridor system serving both nave and outer rooms may give independent access to every space which is used independently of others throughout the whole museum. Such a scheme would realize the essentials of an ideal stated by Mr. Brewer:

A natural history museum suggests itself where the public should be admitted to only a very small synoptic collection of group cases in specially built and lighted alcoves, and adjacent to these in each department, first the collections for those specially interested, beyond these again the reserve collections for the actual student.¹

The scheme may be assumed a sound foundation for architectural development; since it follows the analogy of the cathedral, with its nave, aisles, chapels and triforium. Diagrams 20 to 25 represent in plan and sections a building embodying it. The professional reader will see, and the non-professional reader is asked to bear in mind, that these and following diagrams are not offered as designs, but as drawings showing one way in which certain requirements as to dimensions, arrangement, lighting and assignment of rooms might be observed in a museum design. No more than this could be asked of a museum official, and an architect has the right to demand no less of a professional client.

It may be noted that the modules of this building are taken exactly or nearly from the series of numbers expressing successive approximations to the proportion called by the Greek geometers the Golden Section; that is, the series 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, etc., each after the first two being the sum of the two preceding. In a line divided by the Golden Section the shorter segment is to the longer as the longer is to the whole line. There is no question as to the æsthetic value of the internal harmony of this proportion in certain cases, although the claims of an all-embracing application made for it a generation ago were doubtless excessive.

Diagrams 20 and 21 show that the scheme is based upon the top-lighted gallery already studied, namely, a room thirty-four feet each way with a window at twenty-three feet from the floor. The space occupied by twelve of these

¹ Brewer, p. 389.

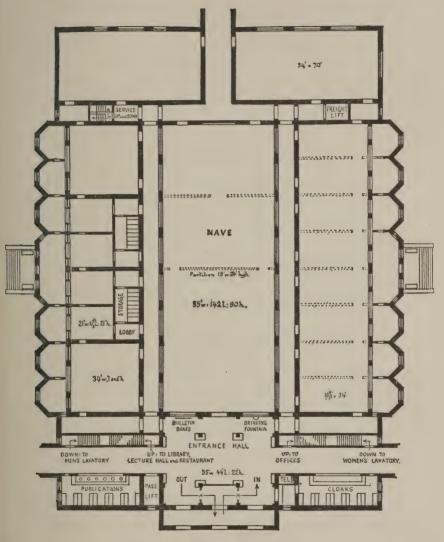


DIAGRAM 20

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galleries is disposed about a corridor eight feet wide completely enclosing a nave fifty-five feet wide, one hundred and forty-two feet long and ninety feet high to its flat ceiling.

The two diagrams (20 and 21) show in addition a feature which is not embodied in the standard museum plan. but which again suggests a cathedral with its ring of outlying chapels. A series of small and low rooms or cabinets thirteen feet wide and sixteen feet six inches long runs along each side of the building. Each of them is reached by a door from one of the main galleries, exception being made of the central double cabinet, here conceived as a vestibule with a doorway and flight of steps to the garden. These cabinets are lighted by windows with sills at domestic height — about three feet. They aim to afford conditions under which side light again becomes available for exhibition purposes; that is, when the visitor no longer walks about to see objects in different places. but seats himself with a window at his back or his side to see objects by its light. The principle of what may be called seated installation, the arrangement of an object to be inspected by persons sitting down, is illustrated in the room set apart in Amsterdam for Rembrandt's Night Watch. A liberal application of the principle has just been advocated by the President of the Museum of Fine Arts, in Boston, Mr. Morris Gray. In Diagrams 20 and 21 this arrangement becomes an integral part of a museum plan. Its advantages are obvious. Objects so shown can be conveniently arranged for the closest study. The visitor can inspect them at his ease and lei-

"Here and there in the different departments, therefore, museums would do well to exhibit works of art distinctly for the man who is seated...."

¹ Annual Report, President of the Museum (1916), p. 19. "Usually, of course, they (visitors) must stand up and move about to see works of art; but where-ever they can sit down and thus get greater enjoyment, they should at least be given the opportunity.

sure. The physical rest prepares him to begin again to walk and stand about, as he must in order to see most of the exhibits. The contents of such cabinets might be changed from time to time, giving visitors the opportunity of closely examining a variety of things under conditions at once pleasant, restful, quiet and good for seeing. In the cabinets as shown, the windows are centrally placed in order not to cast a glare in the eyes as one enters from the main gallery.

The corridor between the main galleries and the nave is purposely kept at the lowest limit of width that will insure the free passage of numbers of people, in order to make impossible its use for exhibition. Above the main galleries a suite of side-lighted offices, thirteen feet in height, occupies the same space and is served by a second corridor over the first. The lower corridor has the height of the cornice of the galleries, twenty-one feet, leaving a space between the two corridors, eleven feet high, accessible from the upper corridor and represented in the diagram as used as a vault for storage. All these corridor spaces borrow light from the nave, the lowest through openings at thirteen feet in the screen separating it from the nave, the intermediate by lunettes crowning the screen, and the highest by a series of triforium windows. The position of the intermediate corridor on a level with the attic of the galleries suggests that it might on occasion become a light chamber instead of storage space, giving minor auxiliary illumination on the window wall of certain of the suite of galleries. The lighting in these galleries would then be the unequally balanced high side light preserving its unity which Mr. Wheelwright admits as an alternative; in a measure also fulfilling Mr. Brewer's ideal of the application of clerestory light to lower rooms.1

 $^{^{1}}$ Museum of Fine Arts, Boston, Communications to the Trustees, vol. 111, pp. 106, 108.

The nave is lighted from windows along the side walls with sills at sixty-seven feet from the floor. These windows would be out of the visitor's range of vision, except from the corner of the eye or much foreshortened, in all standpoints in the gallery. If clear glass were used, the



light in the nave might be too intense for the best seeing. In any case curtains would be desirable to cut off direct sun. The screen with its cornice at eleven to thirteen feet from the floor would give a background rising much above the customary eight-foot case for smaller objects, somewhat above most sculpture, and even above most, if not all, of the cases needed for larger natural history specimens.

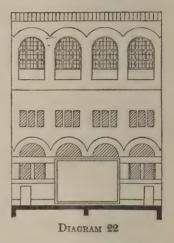
Diagram 22 represents four bays of the nave with the screen in two of them carried to the level of the top of the upper cornice, twenty-four feet from the floor, in order to give a background for a very large canvas. The picture represented is one of the very largest, David's

Crowning of the Emperor Napoleon I in the Louvre, twenty feet high by thirty wide.

The arrangement of the entrance to the nave shown in the plan is represented in Diagram 21, and the arrangement of the exit in Diagram 23. The picture chosen here

is another of the very largest canvases, Titian's Assumption of the Virgin, at Venice, twenty-two feet high by twelve wide. There would be no glare on either picture seen from any position which would bring it all within the range of normal seeing.

The nave is represented as partitioned into three sections, as if the largest were to be used for objects of science and the



smaller two for works of art. The partitions are supposed to run either to the top of the screen, thirteen feet, or to the top of the cornice above, twenty-four feet, according



as lower or higher backgrounds or a more or less complete division is wished for. They might be made removable by keeping them on hand in sections, and using permanent sockets in the floor of the nave opposite the piers. A notion of the probable effect of exhibitions in these divisions of the nave may be

gained from the use of similar partitions twelve feet high in the top-lighted central hall of the new National Museum at Washington. Mr. Brewer writes that the galleries thus formed "afford excellent exhibition space for pictures, and the light from the high laylight (fifty-five feet from the floor) reflected and diffused by the white wall above is excellent." 1 Further, such screens tend to detach the mind of the spectator from the great space overhead; and upon the background they offer, the smallest objects — a collection of insects, of coins, of prints, of busts — would be at home in the largest naves. The largest division would suitably contain any objects but the very largest. For the exhibition of the skeleton of a whale or other gigantic animal, or for a large architectural cast, the whole nave would be none too large. Doors are supposed provided from the corridors to all divisions of the nave, as well as to all the parts into which the gallery space could conveniently be divided. These doors would permit cutting off direct access from one division of the nave to another, passage being around through the corridor; or connecting the exhibits in any division with galleries devoted to corresponding objects.

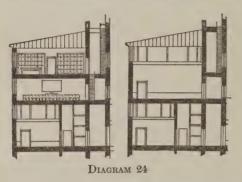
In Diagram 20 the gallery space about the nave is shown with various divisions, as if to accommodate a miscellaneous collection. There are two large rooms, thirty-four by seventy feet, one lighted from the long side only, as if for pictures, the other from both the side and one end, as if for case objects. All of the right hand gallery space is in one large apartment one hundred and forty-two feet long, divided into seventeen-foot bays by partitions reaching only to the cornice. The left hand space contains two standard galleries thirty-four feet square, separated by four cabinets, sixteen and a half by twenty-one feet. In these the ceiling is supposed brought down to the level of the cornice at twenty-one feet, and the window set at fourteen feet. The space behind marked "Storage" in the plan is represented fitted with racks for

¹ Brewer, p. 392.

the accommodation of pictures or other objects in reserve. Comparing these cabinets with the two thirty-four-foot square galleries they replace, the wall space shows a loss of about ten per cent, while about fifteen per cent of the area of the rooms is secured for storage.

It would appear entirely practicable, instead of blocking up the six-and-a-half-foot openings on either side of the central window as shown in the left hand suite, to allow them to remain open, as shown in the right hand suite. If opaque curtains were then provided for the side-openings they could be kept drawn in ordinary weather, to be withdrawn in case of waning light or dark days, or removed in case of a use of the gallery demanding unusual illumination.

Alternative divisions of the space above the cabinets, made possible by the use of the intermediate corridor



for access, are shown in Diagram 24. Of these, one represents the use of the attic space, eleven feet high, for additional studies or classrooms, the other to permit of additional galleries twenty-six feet high.

It may be claimed as a merit of the present general scheme that its corridor system permits this elasticity in the choice of floor levels in the whole structure about the nave.

A fourth possible division and use of space in elevation and plan in this structure is shown in Diagram 25. The end in view is the reservation of light for exhibits, whose success in many instances has already insured it a per-

manent place among museum methods. The gallery of the upper tier, which is shown as an alternative in Diagram 24 and is reached by the intermediate corridor, is here reduced to the width of that on the ground floor, twenty-one feet, and is represented as used either for cases or for exhibits occupying a space of about fourteen by sixteen feet and seen from behind a glass partition dividing off a passageway from door to door. The arrangement nearly reproduces the plan of an outside corridor used for the Zoölogical Collection of the Darmstadt Museum and shown in Diagram 19. The adjoining space is divided horizontally into two suites of smaller spaces for exhibits to be looked at from the corridor through a partition. Their size, twelve by sixteen feet in the intermediate corridor, and ten by twelve feet in the upper, is somewhat greater than that of the Bird Habitat groups in the American Museum of Natural History in New York, whose installation as reported by Mr. Brewer is given in Diagram 19 as an arrangement for a low window; and their method of lighting is like that of the Aquarium at Detroit, Michigan, mentioned with special approval by this critic. Mr. Brewer notes 1 that the Aquarium at Detroit, a city of half a million inhabitants, has a million visitors a year, although three miles from the city proper. "These figures should give museum directors seriously to think; and they should ask themselves, especially those in charge of natural history collections, whether methods of display and lighting more akin to those employed in aguaria — for instance the alcove group system with overhead lighting — might not add enormously to the popularity of their collections." It would appear that such series of room exhibits might include many other kinds of objects than those of natural history: historical remains,

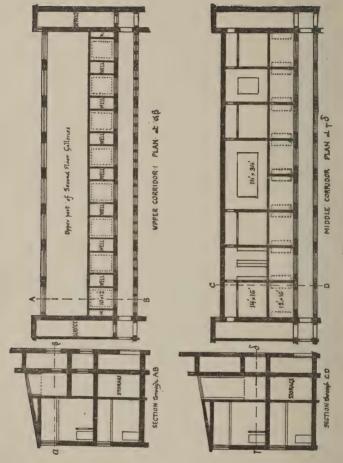


DIAGRAM 25

fragments of interiors, or ethnological specimens. According to the present scheme these two corridor suites would be lighted from a continuous skylight just outside the parapet of the ambulatory on the roof, through two series of wells. The wells lighting the upper suite are about eight by ten feet and six feet deep; those lighting the lower suite about six by ten feet and twenty feet deep. Each of these latter passes between two of the upper suite of cabinets and lights two of the lower and larger.

As the attic lighting of the chief galleries in the present scheme practically reproduces the lighting of the alcoves in the central corridor form of the reservation of light — shown in Diagram 19 and lately advocated as "top side" light by Mr. Seager — and as the device of the solid velum used in the Rottman Gallery has not since found approval or imitation, there remains but one desirable form of the six shown in the diagram which has not yet been taken

advantage of here. This is the method of reserving light for exhibits under a high window employed in the Stockholm Museum, and described by Dr. Bather. Diagram 26 shows an application which might be made of this method in the chief galleries of the present scheme. The window wall of the gallery below the cornice is occupied by a construction like a high case — or, if open, a niche. The inclined back of the upper framework serves

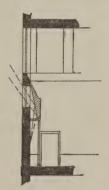


DIAGRAM 26

as a reflecting surface to shield the visitor from light coming from an opening below the cornice, and direct it through a diffusing medium upon the exhibits hung or set below. The window wall up to eleven feet or above could in this way be specially lighted without any direct glare reach-

¹ F. A. Bather, Museumskunde, vol. iv (1908), pp. 66 f.

ing the visitor's eyes. It must be admitted that illumination from an unseen source directly above the object inspected is top light in a pronounced form. While in special instances it might be justified, a certain unearthliness of aspect would appear inseparable from it, and its availability for museum objects in general may be doubted. In the attic-lighted galleries of the present scheme the need of such a device might never be felt. The large and bright reflecting surface above the opposite cornice would insure a considerable illumination on the window wall, and the eyes of the visitor would retain a degree of sensibility at present unknown in museums.

The entrance section of the building shown in Diagram 20 is conceived as a large mass fronting the rest of the structure after the manner of the towers and their connection in a cathedral. It is supposed constructed in four floors, from twenty-two feet downward in height, to contain all the various minor facilities now offered by large museums. The entrance hall is flanked by a cloak-room and an office for the sale of catalogues and photographs. and gives access by stairways downward to the public lavatories, and upward by stairways and an elevator to the offices and library immediately above, the lecture hall above this, and the restaurant and kitchen on the top floor. The indicated size of these main rooms, fortyfour by fifty-five feet, gives an ample reading-room and restaurant, and a lecture hall seating perhaps three hundred people, and capable of extension. All the upper rooms being central in the front of the building may be given unobstructed light from along one side. The service stairway and the freight elevator provided for attendants and supplies in the transverse corridor at the rear of the building would be accessible from these rooms through the upper corridors on either side of the nave.

The entrance hall would be lighted both from the nave over the screen and from or over the vestibule in front. It is large enough to be the general meeting place of visitors, and for that purpose its central section is provided with seats about the columns and against the adjacent walls. The cloak-room has a window directly opposite the entrance turnstile, and a long counter opening on the transverse passage, where, on crowded occasions, a number of persons could stand out of the way of passers and get their wraps from several attendants. A telephone booth adjoins. The publication office is in the corresponding position, where intending purchasers could inspect photographs undisturbed and under ample light from a high side window. As all of these utilities, including the elevator, are placed in the transverse passages, the entrance hall itself could be designed and used as a dignified hall of reception, containing nothing to distract the visitor from the essential purpose of his visit.

An excess provision is made in this entrance section for the various subsidiary needs of a museum, in anticipation of the inevitable expansion toward which every museum must look. A museum by its nature as an accumulation of objects worth keeping in sight is liable to grow as other buildings are not, and in its design should be accommodated to this fact. A theatre has a limit of size, even a railway station may be adjusted to all reasonable expectation of traffic, but there is no limit to the desire of a community to possess in its museum an epitome of the surrounding world of nature and man. In strictness, no plan for a museum building which contemplates its eventual completion is an adequate plan. The design must always be such as will not be marred by additions. Two alternatives are possible.

The choice of a plan for a building to be indefinitely

extended lies between a single conglomerate structure and a number of buildings connected by corridors — a pile or a group; and two considerations in the present case point to the choice of a group.

If growth were to take the form of an extension of the building shown in Diagram 20, its nave must either be prolonged, or extended by transepts or wings. Prolongation could not be indefinitely continued both for artistic and practical reasons. The Museum of Natural History in Paris is probably alone among museums in the great length — 1725 feet — anticipated for its series of narrow halls on the Rue Buffon. Even the long wing of the Louvre is already voted a weariness to the traveller. Transepts or wings would violate the fundamental external requirement of good museum lighting, that there should be no rooms lighted by windows at internal angles between high walls. It may be stated as a canon of the external conditions of light for a museum that only a minimum of light in the exhibition rooms may be permitted to come by reflection from façades and roofs as a half of it does in an internal angle. The ideal is that it should be impossible from any space devoted to exhibition to see through the light opening anything but the sky. As museums are now constructed, even top light has not the advantage in this respect that might be anticipated, towers and higher rising walls often cutting off large sections of the sky from the gallery below; while side-lighted rooms are placed without hesitation in the angles of wings, behind pillars, or on courts whose opposite walls may block off the sky almost completely. Yet the light reflected from façades and from roofs is deficient for museum purposes both in quantity and quality. These surfaces reflect but a fraction of the light coming from the sky, they are generally colored and their weathering is never within control.

There remains the alternative of a group. The museum accommodations shown in Diagram 20 may be indefinitely expanded by adding other buildings at a distance to be determined by the canon of good external lighting, and connecting them with each other by low corridors. Such a group is the inevitable outcome if a museum is to be planned for indefinite expansion according to its essential need of white light.

The possible connection of other buildings with that shown in Diagram 20 is suggested by the open ends of the transverse passage through the entrance hall and that leading out from the nave. The structure, in itself of very modest dimensions as museums go, may become the parent building of a museum group of any size. In the outline plan of Diagram 27 it is represented as Stage I



DIAGRAM

of such a development. Diagram 28 shows an immediate descendant, here supposed connected with its progenitor by a prolongation of the transverse passage as an outside corridor one hundred and fifty feet long.1 This connecting corridor, being designed for daily public use and not as an auxiliary passage for exceptional occasions and special classes of persons, is planned thirteen feet wide. In the Museum of Natural History at Paris, structures on either side the main building are connected with it by corridors fifty feet long and ten feet wide. The present corridor is conceived as a low cloister about thirteen feet high with a still lower service passage over it connected with the upper system of the parent building.

Except for the entrance section, the pavilion reproduces in little all the features of the parent building. It

¹ To guard against risk from fire, Mr. Weissman thinks that a space of 140 feet should separate a museum on all sides from neighboring houses. "Gallery Building," Journal of the Royal Institute of British Architects, vol. XIV (1907), p. 417.

has its central public space, like the crossing and lantern of a cathedral, its suite of environing galleries, its public and service stairways, its department rooms or galleries

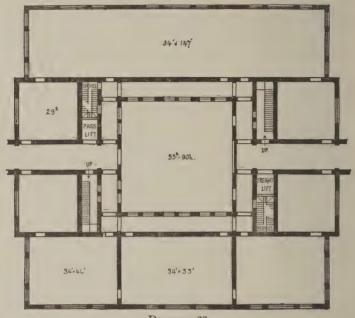
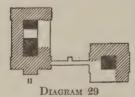


DIAGRAM 28

above, its passenger and freight lifts, and its corridor system. The result of its erection would be the group of buildings shown in the outline plan of Diagram 29 as Stage II of a progressive development from the incon-



spicuous beginning shown in Diagram 20. A sound architectural result might be expected, since the two components of the group would illustrate the same general type of design on the same modules, and yet with suffi-

cient variety of application to escape monotony.

On account of this general similarity — only the galleries on either side the entrance corridor and those oppo-

site contributing a new unit of size — the pavilion may grow by expansion toward and beyond the likeness of the parent building. Its lantern may add to itself two transverse naves in opposite directions, about which the corridors and galleries may likewise grow. It is to be assumed that appropriate provision in the foundation and walls involved would make such extension an easy matter, and something to be undertaken little by little, as the needs of the collections demanded.

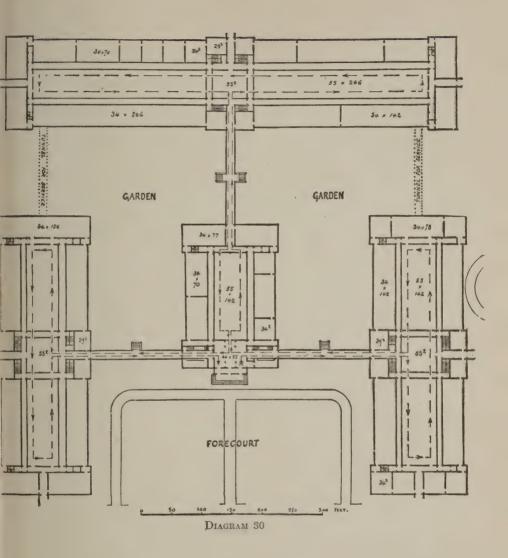
In further stages of growth, other pavilions, reached by the other two corridors left open in Diagram 20, might be added, and expanded in their turn. In Diagram 30 the scheme is represented at a point when its size would approach that of the largest museums of any kind either existing or planned — the megalo-museum as now built or dreamed.

The space occupied by the buildings and grounds shown in Diagram 30 within the corners indicated is a square of eight hundred feet, or sixteen acres, of which about seven and a half acres are covered by construction. In this proportion the scheme differs greatly from the largest modern museums. In all cases these cover more and sometimes all of the ground area they occupy. In the area of the buildings the scheme is still below the largest; but its indefinite extension on the same plan is possible, and as the diagram shows, in five ways. The completed plan of the Metropolitan Museum of Art in New York calls for a building nine hundred and fifty by five hundred and fifty feet, covering thirteen acres with a comparatively small deduction for courts, already in part covered by construction. The British Museum as built and the American Museum of Natural History in New York as planned, each cover eight acres with their buildings, the courts of the American Museum adding four and a half acres to

its proposed total extent. The new Field Museum of Natural History in Chicago covers six acres, and the Museum of Natural History in London four and a half acres, the buildings in each case extending over the entire area occupied. The building of the Brooklyn Institute of Arts and Sciences will occupy with its courts as planned an area of eight acres and cover five and a half acres with construction. The National Museum at Washington covers four acres, or with its courts, five.

A comparison of floor space yields other results on account of the different number of floors in the building. In the National Museum at Washington the floor space devoted to exhibition is about 220,000 square feet, or five and a half acres, and that devoted to department offices and storage about four acres, the total floor space in four floors being nearly twelve acres. The administration of the museum is reported by Mr. Brewer as thinking the exhibition space large enough for any museum, but the department space too small for their purposes. According to this judgment a megalo-museum of the present should not devote more than about five acres to exhibition space, but might to advantage assign at least an equal area to department purposes. The museum of Diagram 30 meets both requirements; but by reserving the first floor galleries for those who especially wish to enter, gives but two of its five acres of exhibition space to the public as a whole.1 The reduction may be regarded as a wholesome readaptation of the amount of things shown to the powers of those who are to see them. A walk through five acres of floor space passing within

¹ The total floor area of the buildings represented in Diagram 30 is about 600,000 feet, or fifteen acres. The basement would cover 215,000 feet, the entrance block in its four floors 30,000, the naves 80,000, the first floor galleries 135,000, and the second floor also 135,000. The department space partly in the basement and partly on the second floor would easily reach and pass the limit of five acres.



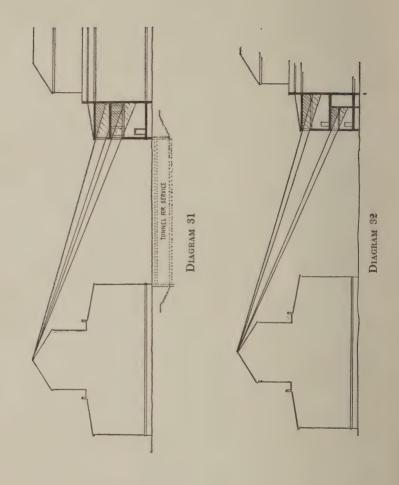
THE LIBERARY ONLYERASSY OF ILLINOIS fifteen feet of all the exhibits might be expected to extend to about three miles. Through the naves and cloisters of the present scheme it would reduce to about one mile. A pressing need of a better adjustment of means to ends in the matter of public exhibition would be met by such a limitation of primary exhibition space.

Conceived as a group in elevation, the scheme would offer opportunities for three lantern towers disposed symmetrically about the parent building, whose cathedral front would distinguish it in appearance from the rest. The high naves would announce the paramount interest of the museum in the community generally. The use of high naves meets the architectural objection Mr. Weissman expresses to top-lighted museums. "Buildings like these being rather low, the exterior is not very satisfactory." The three connecting cloisters are each given openings at the centre into two extensive gardens among the wings. The main entrance would be approached through a wide forecourt, and a business entrance would have a driveway of its own at the side.

A park is the natural setting for a large museum, since a park is the pleasure ground of a city and every large museum is principally a holiday house, having no claim on the people generally except in their hours of leisure. A park, too, best offers the quiet and exemption from dust and risk of fire which every museum needs; and a park alone gives it freedom to expand into a group of structures sufficiently open to insure the predominance of light from the sky in the galleries.

In the naves of the present scheme with its liberal gardens and forecourt, the ideal of pure skylight would be everywhere fulfilled except in a few windows of the parent building, through which it would be possible to see

¹ Weissman, p. 417.



from the floor a part of the rear wall of the entrance structure.

In the galleries fronting outward there would be no obstruction from other buildings of the group. The conditions in the inward-fronting galleries are represented in Diagrams 31 and 32. The narrow cross-hatching indicates the area in which all the light received in a plane perpendicular to the wall of the room is reflected from the walls and roof of the opposite wing; the space left blank indicates the area receiving light from the sky only; and the wider cross-hatching indicates the area receiving part of its light from the sky and part by reflection, the proportion of skylight increasing as the blank space is approached. The sections are drawn through the tunnel for service connecting the ends of the largest wing with the two next in size, because at this point the buildings are nearest together and the conditions are most unfavorable. They put the matter unfavorably, also, in that the amount of obstruction represented obtains through only a part of the horizontal angle over which light enters the gallery windows. But even the obstruction as shown is negligible. The diagrams indicate that all parts of both opposite and transverse walls receive light only from the sky up to ten feet in the thirty-four-foot galleries, to eight feet in the twenty-six-foot second floor galleries, and up to five feet in the twenty-one-foot first floor galleries; and that all other parts of the exhibition zone get some skylight and most parts a preponderance. There would also be some slight interference with light from the sky, due to the connecting cloisters, on one of the walls of the adjacent twenty-nine-foot square galleries in each wing.

It is hardly too much to claim that in a building such as this, while the light would be ample in quantity and practically ideal in quality, the problem of glare would

be completely solved. From the time the visitor enters the museum until he leaves it, he is never brought face to face with any source of light. If he keeps to the public space he will never see one in a way to notice it; and while, in the galleries, at one doorway at each corner of each wing he sees a window at an angle before him, it would be almost wholly above the range of his normal vision. It is to be particularly remarked that he enters the galleries through a corridor but dimly lighted by a window he cannot see. In the City Museum of Amsterdam, where the stairway is lighted from above through yellowish glass. the architect thought a similar provision necessary. Mr. Weissman writes: "As it would not be well to enter the gallery rooms at once from this warm light, comparatively dark rooms were arranged through which the visitors have to pass before entering." 1

In the museum of Diagram 30 a degree of visual sensibility might be confidently awaited that would render its main lighting problem one of exclusion and not of admission, and which would notably lessen the fatigue of a visit.

The question of artificial lighting has not been touched upon for two reasons. First, a museum is a daylight institution. Any works of fine art it may contain were made in daylight and meant to be looked at in daylight; and none of its contents have an appeal that can compete with the more restful or more stirring enjoyments or means of improvement to which our evenings are given. Museum objects demand to be seen in hours of complete relaxation, and not in hours needed for recovery from the cares and excitements of full days. At present Saturday afternoons and Sundays are the only times during which people in general can be expected to visit

¹ Weissman, p. 443.

museums, and only if further reductions are made in hours of work can they be led to spend more of their time there to good purpose. Again, a striking fact has been established by Professor Ferree's recent inquiries. Artificial lighting proves a source of eye-strain hitherto unsuspected. His experiments show that while after several hours of work under daylight the capacity of the eye remains practically what it was at first, the same period of work under artificial light is marked by a steady and rapid decline in visual powers. Artificial illumination of museum exhibits adds a new and all-important kind of weariness to what is already one of the most exhausting of occupations.

The search for the best internal conditions of light in museums led to the substitution of naves for courts in the buildings of which the scheme of Diagram 30 is composed; and the search for the best external conditions determined it as a group instead of a conglomerate. There is another consideration of great importance which would of itself suffice to incline the choice toward the radial plan of buildings with cloister connections instead of the cellular plan of a building with interior courts. A museum building needs to be comprehensible as a whole to its visitors. They must know where they are at any time, what remains before them and whither to turn to reach it. The need is felt by every one in a museum with which he is not familiar. It is felt by the majority of people in the museum of their own town, and by all without exception in the museums of other places. Every one in most museums and most people in every museum want to be able to see all its departments and all its chief treasures in one visit of an hour or a few hours. In order

¹ C. E. Ferree, "Tests for the Efficiency of the Eye," Transactions of the Illuminating Engineering Society, vol. viii, no. 1 (January, 1913), pp. 51 and 52.

that they should be able to do this without bewilderment. difficulty and waste of time, there should be an easily comprehensible circuit through the whole space devoted to the public. Such a circuit is possible and easy in a museum on the radial plan here adopted, and difficult or impossible in a museum on the usual cellular plan. One simple rule without any map or plan would guide the visitor through the whole public space of the scheme of Diagram 30 or its further developments, and carry him back to his starting-point without bringing him twice before the same exhibits — "Keep to the right when you can." The broken line shows whither this rule would lead . him on starting from the entrance. Keeping it in mind, there is no alternative presented at any point; no opportunity to say, "Have we seen this before?" or "Which shall we take first?" If there is any turn to the right before him he has not seen the collection to which it leads. and there is no need of deciding what to see, for all will be seen in course by following the rule. With a cellular plan, it may be impossible to see all the galleries without seeing some twice; and when possible, none but a complicated set of directions will enable the visitor to do it.

This appears from the consideration that from any junction of three wings at right angles, of which there are two on opposite sides of the building in a museum about two courts, four in a museum about four, and so on for more complex schemes, there are three paths which sooner or later must be traversed if all the exhibits are to be inspected. A single line representing the visitor's path has but two ends; and one of these ends must lie at each of the triple points, the line being continuous at that point in the other two possible directions. Hence, starting at the entrance as one triple point, a single journey through a museum about two courts will end at the

opposite triple point, and to reach the entrance he must traverse the central wing again, as shown in Diagram 33. It is true that he might then ascend the stairs and visit the

next floor in the contrary sense; so that if the exhibition space consisted of an even number of floors the visitor might return finally to

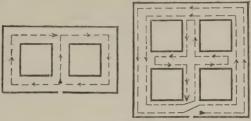


DIAGRAM 33

the entrance by the elevator or stairway without seeing the same exhibits twice. It is also true that a double journey up one side and down the other in each wing is possible without passing the same side twice, but the process proves complicated. The visitor may, for example in a building with four courts, make twice the circuit of the outer wings of the building as shown in Diagram 33, and then, proceeding up the central wing to its crossing with others, from this point out go up and back through each of these, taking his way back to the entrance as his second trip through the central wing. But beside exalting the purpose to get through the museum over the purpose to see its contents as far as may be in connected fashion, this rule presupposes a capacity of orientation and a memory for locality which would be sorely tested at each of the four points where alternative ways opened, and of which the public in general is far from capable. As a popular circuit, the journey would probably be prolific of repeated visits to the same exhibits and the missing of many; while the rule given for the museum of Diagram 30 would lead to no such annoyance because of its simple content and orderly result. At the entrance there would be the choice which of the three ways open

to follow first. Diagram 30 supposes the right hand wing chosen, but the choice of the parent building would give the same result. The visitor would enter the nave, since the right hand passage, leading to the galleries, would not be open. Passing through the nave and into the corridor beyond, he must turn to the left because the right hand door to the corridor is also closed; and taking the first turn to the right, would find himself in the cloister leading to the long wing. Traversing this wing, first on one side and then the other, by the same rule, he would eventually find himself again in the cloister, and after making a short necessary turn to the left, again in the nave of the parent building and back at the entrance. Here a way to the right again opens, leading to one of the smaller wings through both of which the same rule would lead him eventually again to the entrance, having exhausted his three choices. Meanwhile, at any point the specially interested visitor could, by asking an attendant, learn the way to such of the related galleries as he might wish to see; and could inspect their contents undisturbed by the main throng of visitors. This exemption would be especially welcome in museums of art. Professor Paul Clemen writes: "Our modern exhibition buildings have shown that the rooms which do not lie directly in the way of the throng have the happiest and most intimate effect and are best adapted for the quiet and contemplative enjoyment of art." 1 In the present circuit one only of the naves, that of the parent building, would have been seen in two visits separated by an interval. In default of special measures to the contrary, the collections shown here would doubtless always retain something of their original miscellaneous character as the nucleus of all the collections. The others, each supposedly devoted to one main department of the mu-

 $^{^{\}rm 1}$ Paul Clemen, Zeitschrift fur Bildende Kunst (1905), p. 40.

seum, would have been seen continuously. These continuous visits would be spaced each from the other by promenades through the cloisters. The public circuit of the museum of Diagram 30, short as it is, would not consist of an unbroken round of inspection of fresh objects, as in almost all existing museums, but of a series of separate visits to more or less related objects with short walks between. While the contents of the museum would everywhere be presented to the visitor in rooms giving no view of anything else, there would be recurrent opportunities and time for a return to the outside world, and in fine weather for a descent into the gardens. These cloister promenades would at once rest his eyes, vary the call on his muscles, and give him opportunity to turn his mind away from what had gone toward what was coming.

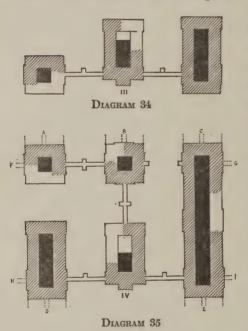
In another way the fatigue of a visit to the museum of Diagram 30 would be less than in most other museums. The whole public space and most, if not all, of the reserved exhibits could be seen without climbing any stairs. A staircase in a museum confronts the visitor with a physical task of a kind he may wish to avoid and which in consideration of the mental tasks before him, he may well be spared if it can so be arranged.

The structure of the scheme lends itself to the division of the collections into seven departments under three heads. It is tempting to fill out such a division in accordance with the possibilities of gathering tangible objects worth keeping. In the general museum the three wings may represent man, other forms of life and the planet we inhabit; or Anthropology, Biology, and Geology, as they do in the National Museum at Washington. In an art

^{1 &}quot;... Every one I believe greeted with joy the idea of a museum where weary mounting of stairs was to be wholly, or to a large extent, eliminated." R. Clipston Sturgis, Report on Plans Presented to the Building Committee of the Museum of Fine Arts (Boston, 1905), p. 11.

museum, they may represent the graphic arts, the ancient art of the Mediterranean, and modern art of East and West, as they do at the Museum of Fine Arts in Boston. But a museum is born, not made; its collections mainly grow, not by taking thought, but by the grace of Heaven; and any large plan for its development is foredoomed to disappointment.

At first, it may be assumed, any collections the parent building was erected to contain would be insufficient to fill it, and some of the space could, pending their



growth, be lent to other enterprises, classes, clubs, or other organizations for public welfare. This is the situation represented by the blank spaces in outline plan I of Diagram 27, where the public, and most of the gallery space, is indicated as filled. Outline plan II of Diagram 29 represents the addition of a pavilion to accommodate one of

the departments grown beyond the available space in the parent building. Its transfer vacates space in both the nave and the galleries of the parent building, and in the pavilion there is space which it must grow to fill. Outline plan III of Diagram 34 represents the transplanting of another department into a second pavilion, and

the enlargement of the first to accommodate the rapid growth of the department first moved. At this point in the supposed growth of the museum, a large endowment, a government grant, extraordinary success in some expedition, or other unforeseeable event, suddenly reduces the symmetric plan of Diagram 30 to an impossibility. The department first moved now turns out to be the main museum. Long discussions ensue, and the architects are called upon to devise a substitute. Nevertheless, the principle adopted proves equal to the emergency, as appears in outline plan IV of Diagram 35. The first pavilion expands into a great double wing, like that planned to be entered from the end of the parent building. Other pavilions follow in due course, leaving the group still a harmonious architectural mass, if an unsymmetrical one, with further unlimited possibilities of extension. Such a combination of naves, corridors, and galleries in a way to meet unexpected forms of museum growth, may be likened to the farmstead type of Lombardy, capable of endless new forms of shelter for a family, its stock, its tools, and its harvests, each a satisfactory composition; or to a tree like the pine, from which almost any branch may be cut without destroying its picturesque completeness.1

¹ The nave plan in all its stages illustrates in detail the requirements of museum design thus stated by Mr. Clipston Sturgis: "The ideal for the arrangement of each department taken in connection with the previous ideals of a single main floor and independent departments would be (1) that each should have its entrance on a main artery of the group; (2) that the visitor should be given a short circuit of the most important galleries, in which everything shown should be good of its kind, should be given plenty of space, and exhibited under the very best circumstances of light and surroundings; (3) that the route should be made perfectly clear . . . giving the visitor the opportunity to go on to the other rooms of the department, or if he prefers, leave the department where he entered it on the main artery. . . . (4) that a longer, but equally clear circuit should embrace the reserve galleries which should be readily accessible for all who desire, and yet in a measure withdrawn; (5) and that finally, there should be the last group, clear of either circuit, through which there is no thoroughfare, for the work and study of the department." Museum of Fine Arts, Bos-

The scheme of Diagram 30 is an invention only in the Patent Office sense of a possible "improvement in the art." It may be regarded as a step in a development of which the Naples Museum (1587), the Old Pinacothek in Munich (1826), the Kelvingrove Museum in Glasgow (1901), and the Museum of Fine Arts in Boston (1909), offer successive illustrations. The museum at Naples laid the foundation in its double row of rooms around large spaces on either side a block devoted to access. The Old Pinacothek settled the unit of plan for museums as an exhibition space plus a corridor adjoining. The Kelvingrove Museum adopted the principle of lighting a large interior space from a clerestory. The Boston Museum chose a radial lay-out about garden courts. These steps have been summed by reducing one of the two exterior spaces of the Naples Museum to a corridor, as in the Pinacothek, and devoting the interior space to primary exhibition, while doubling the secondary space in accordance with the modern tripartite division of museum functions: further, by extending the clerestory light of the Kelvingrove Museum to all the exhibition space, the large interior courts becoming naves, and the galleries about receiving attic windows; finally, by carrying on the radial principle, since illustrated also in the University Museum at Philadelphia, the connecting links becoming cloisters. ton, Report on Plans Presented to the Building Committee, by R. Clipston Sturgis

(1905), p. 15.

These five requirements are met as follows in the diagrams: (1) the entrance of each building of the group is on the corridor system connecting all; (2) the naves offer a clear circuit through the most important exhibits shown under the best conditions; (3) the route through them brings the visitor to the point where he entered, and offers him the alternative of returning to the main entrance without seeing anything else; (4) a longer but equally simple route leads through the outlying or subsidiary galleries, which are entirely independent of the naves though no less accessible; (5) the work and the study of the department go on in rooms reached by stairs, and hence wholly aside from either the primary or secondary thoroughfares for visitors. It is a fortunate circumstance that a museum scheme aiming at ideal lighting should prove to embody also an ideal of arrangement reached irrespective of lighting.

The result is a scheme which appears, and has reason to claim itself, adapted to the needs of museums generally, scientific or artistic, large or small.

The solution of the lighting problem in museums has been halted for a century by a datum of mistaken erudition. The choice of the Classical type — based ultimately on columns against a blank wall — for buildings devoted to vision would be an absurdity were it not a blunder. The hypethral myth is gone, and reasoning should replace it. Which way should light come in a room where people walk about to use their eyes by it? Neither vertically, nor horizontally, but diagonally.

A fundamental objection interposes itself. There is another psychological factor as important as glare. However advantageous to the visitor's eyes, are not the high windows depressing to his spirits? Things are better seen, but are they as much enjoyed? Yet to be enjoyed is what they are seen for. In our preoccupation with the objects, have we not taken the heart out of the spectator?

Two answers may be made to this objection. It may be charged first with confusing the effect of vertical light, which is really depressing, with that of diagonal light, which is only quieting. A small courtyard with high walls is almost invariably dismal; and as far as lighting goes, every top-lighted museum gallery is such a small courtyard. But a cathedral never depresses; it only solemnizes us. A high-windowed banquet hall is not gloomy; it is only stately. The Pantheon at Rome, centrally lighted from the sky, may be cheerless; but St. Peter's, though no more abundantly lighted from its high lunettes, is almost a jubilant place. Unquestionably the reputation of museums as mausolea of art, cold storage warehouses for their contents as they have been called,

is partly, perhaps wholly, due to their predominant use of top light. Their usual architectural type derives indeed from the style of which the Mausoleum of Halicarnassus was a capital example. No wonder that they retain the association of the tomb. But high side light is associated only with the most dignified interiors of all kinds.

The second answer is that museums are after all associated with death, in that they are the resurrection places of things which were made for other surroundings, but whose natural life is ended. The pictures come from churches, public buildings or private dwellings now destroved or put to other uses. The sculptures come from architectural monuments now dismembered. The objects of minor art once graced all the scenes and occasions of every day, from balls to battlefields. Hence to see them as it was intended they should be seen requires an imaginative effort, a detachment from the here and now, and an immersion in the there and then. A system of their lighting which shall hold away from us the distractions of the present moment, and enable us to concentrate ourselves upon each individual thing and live into its departed atmosphere is an essential of good seeing. Far from taking the heart out of the spectator, windows which show him only treetops or the sky help to put into him the heart he needs to see them as they still may be seen. Gloom hinders, but peace of mind helps. The Salle de Travail of the Bibliothèque Nationale in Paris is adorned above the bookshelves with frescoed lunettes depicting only foliage; and to lift one's eyes to these is just the featureless distraction the reader needs. So Wagner, in designing his theatre at Bayreuth, arranged that orchestra and audience should disappear for every hearer, leaving only the scene before him massively framed like a great painting. A true psychological instinct inspired

this arrangement, and would be followed by museums that should raise the light openings of their galleries out of the view of the visitor, without choosing for them the dispiriting form of apertures overhead. "Il y a deux choses," wrote La Rochefoucauld, "qu'on ne doit pas regarder en face: le soleil et la mort"; — but the maxim demands completion, "excepté en regardant l'un à travers l'autre." A mausoleum looks straight at death; but a cathedral through death at immortality: and a museum, which does the same, may claim the right to pattern after the cathedral.

The solution of the problem of overgrowth in museums is as simple as Columbus's egg. They must not be allowed to become so large. It has been proposed that smaller museums, each with its different scope, should be scattered about our newer cities as they have already grown up without design in older centres. The idea of small museums is most attractive, but one does not just see why the modern world should seek to imitate the chance result of former times.

Why not gather the museums of a town, or most of them, together in its most favorable spot, keeping them just far enough apart not to obstruct each other's light, but still near enough together to be managed, and on occasion used, as one? This is the group system here proposed.

It may be replied to this entire argument, and with truth, that apart from isolated and more or less far-off examples, attic lighting, together with the multiple scheme developed from it, is purely a theory. The question then arises whether it would not reward some museum with great expectations to spend five thousand dollars in constructing and testing an experimental attic-lighted room as a premium of insurance against the possible waste of five million dollars in unsatisfactory buildings.

III THE SKIASCOPE



THE SKIASCOPE IN USE

A long and unfamiliar name for a small and not unfamiliar thing. The word means "shadow-seer," the seer from and into shadows ($\sigma\kappa ia$, shadow; $\sigma\kappa o\pi \epsilon \omega$, to see). The skiascope uses looking from shadow as a means of looking into shadow. It has been devised for the purpose of demonstrating a visual principle not yet given the importance it deserves by museum people.

For good seeing, it is more important that the eyes should be sufficiently shaded than that the object should be abundantly lighted.

To prove this principle we must provide some means of diminishing our field of view so that the eyes are shaded approximately from everything except the object looked at. The skiascope does this in handy fashion, with the result that we see things well through it in almost any lighting. The instrument has, therefore, at once a practical and a theoretical value. The user not only sees better with it but also learns that the chief obstacle to seeing things well is generally glare from elsewhere.

In artificial lighting the importance of keeping sources of light out of the eyes is now admitted. The lesson was taught conspicuously at the Panama-Pacific Exposition, and later at the Statue of Liberty in New York Harbor. We have found that the best way to show things at night is not to light them up in the old fashion, by distributing sources of light over them to dispute the observer's visual strength with the objects to be seen, but to show them in a glow, which, though it may be dimmer, contains no brilliant points to deaden the susceptibility of the eyes.

In natural lighting it may be impossible to conceal the sources of light: for example, the low windows or the ceiling lights of a side- or top-lighted museum gallery. An alternative in case of need is to shade the visitor's eyes; and this the skiascope does.

The instrument consists essentially of a small, light box with flexible sides, open at the ends, lined with black and divided longitudinally by a central black partition; one end of the box being shaped to fit closely against the eyes, and the other broadened to give a sufficient field of view. The flexible sides permit of shutting the skiascope up when not in use. Wires forming a handle turn up out of the way, reducing the instrument to about the size of a small thin book, capable of being carried in a good-sized pocket.

Eye-shades of various forms are common. The skiascope is a novelty only in the handy way in which it restricts the observer's view to a small part of the normal field of vision. At a distance of six or eight feet from a wall he sees only a patch of it perhaps four feet high and three feet broad. If the space between two adjacent windows of a side-lighted room is not too narrow, he can inspect an object hung between them without getting the glare from either. The view of an object so placed which the skiascope gives is a revelation. Generally, the window wall of a gallery is regarded as so much space lost for serious exhibition purposes; or at best as appropriate only for things not needing, perhaps not deserving, to be seen in detail. The skiascope makes the space on a window wall as valuable within limits as any. A window wall is lighted (unless there is cross-lighting) only indirectly and by reflection from the rest of the room; but this illumination proves in most cases quite enough. Not lack of light but lack of sight accounts for its unavailability to the unshielded eye.

But the value of an eye-shade like the skiascope is not confined to window walls. Raising it to the eyes in a top-lighted gallery, a noticeably deeper tone spreads over the pictures, and accentuated lights and shadows appear on the sculptures. We realize that generally the fraction of ceiling light within our view and perhaps also illuminated parts of walls and floors, have robbed the canvases and marbles of a share of their designed effectiveness.

The museum use of an eye-shade, however handy, will doubtless always be a restricted one. For the occasional advantages it gives, people will hardly care to burden themselves with an apparatus conspicuous in use and needing to be carried about. Yet in galleries abroad the old-fashioned tubular eye-shades are sometimes handed visitors for use in inspecting individual masterpieces. In certain galleries skiascopes might, it would seem, be added to the facilities, such as chairs and catalogues, offered for the visitor's comfort and information. When not in use, the skiascope might hang at the doorways. Specially interested persons would certainly appreciate an aid to good seeing; and the offer of it would give the museum a wider freedom in the use for exhibition purposes of any parts of the interior particularly subject to glare.

The theoretic value of the skiascope is incontestable. The demonstration it gives that avoidance of glare in the visitor's eyes is a prime necessity in museum planning and installation will surely in future lead to the adoption of means to minimize the evil. The skiascope is here offered as a factor in an anti-glare propaganda.



THE SKIASCOPE CLOSED

As the skiascope will very likely never become a commercial proposition, it may be of use to describe its make and making in detail.

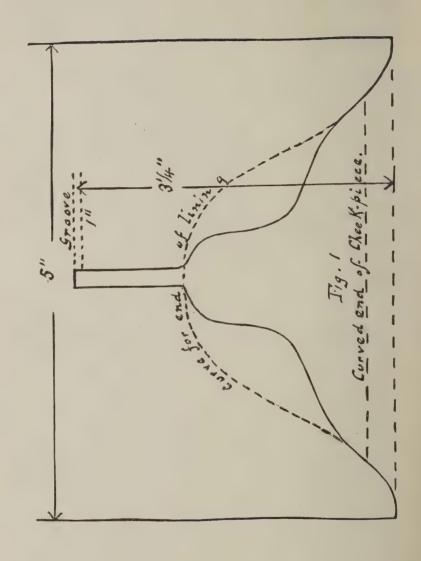
Parts

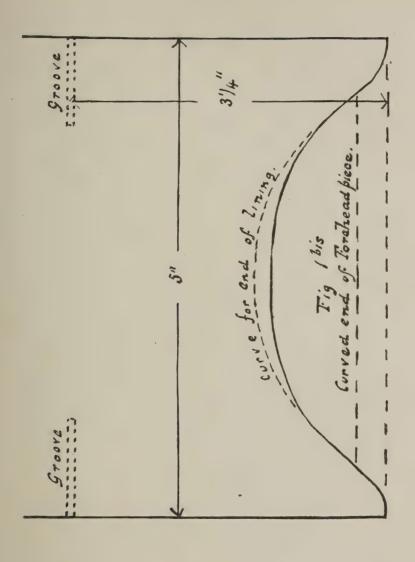
1. Two pieces of three-sixteenths inch board six and one half inches long by five inches wide, one end shaped as shown (full size for convenience of tracing) in Figures 1 and 1 bis. Each is stained oak on one side and the edges. These are respectively the forehead and cheek pieces of the instrument. The forehead piece has two grooves, one sixteenth inch deep, on the raw side, and the cheek piece one, as shown.

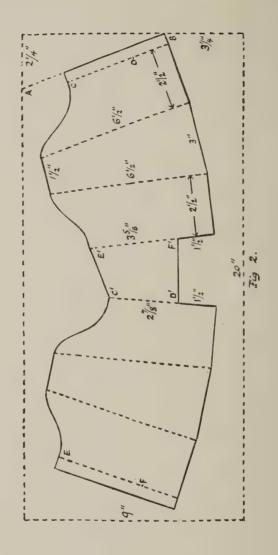
2. A piece of black flannel, not too heavy, shaped as shown in Figure 2. This makes the flexible sides, the middle partition and

the lining of forehead and cheek pieces.

3. Two wire attachments (size 14) forming together the handle of the skiascope, shaped as shown in Figure 3. The three ends of these wires are secured in the grooves of the boards by minute staples driven through and clinched.

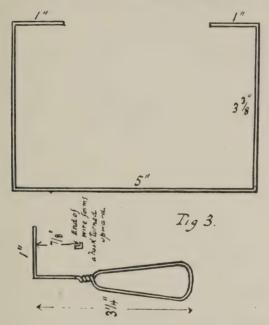






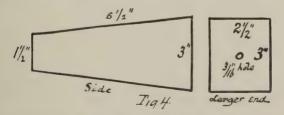
Construction

4. The pair of lining blocks each shaped as in Figure 4 and with three-sixteenths inch central holes from end to end are used as forms over which to stretch into position the flannel lining of

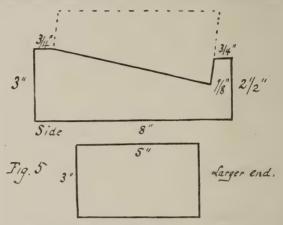


the instrument while it is being cut and glued together as hereafter described; and also later in glueing the forehead and cheek pieces to the lining.

5. The bed-block shaped as shown in Figure 5 is used in glueing the forehead and cheek pieces to the lining when this is



formed up over the lining blocks. It brings the upper surface of the lining blocks to a level position in order to hold a weight or clamps conveniently. 6. The two wire clamps, each shaped as shown in Figure 6, are used in the process of covering the lining blocks with the flannel used as lining in order to hold them closely together as



hereafter described. The two prongs of one are inserted into the central holes of the larger ends of the two blocks and those of the other into the holes at the smaller ends.

To form up the lining

Cut a piece of the flannel somewhat larger than the pattern shown in Figure 2: as there indicated by dotted lines. Flannel being a stretchy material, the attempt to fit it if previously cut according to the pattern is likely to give trouble. Flannel is chosen rather than any stiff material for the less disturbing lines with which it frames the field of view. Cut a piece off the flannel along the line AB. With a red crayon draw a line on the flannel parallel to and half an inch back of the line AB. Fasten the



flannel along this line to one edge of one of the rectangular sides of one of the lining blocks with a few thumb tacks. The small end of the block should lie toward A, the large end toward B. Wrap the block tightly in the flannel. When wholly covered with one thickness, place the other lining block against the covered block, small end to small end, and its rectangular sides in a

plane with the rectangular sides of the covered block. Insert the two clamps in the two ends of the blocks, thus fastening them firmly together. Now, with the rest of the flannel, cover the second block tightly, securing it at the last edge reached by another set of thumb tacks. The flannel being larger than the pattern will lap over the ends of the blocks and more than cover the last face of the second block. Trim off the superfluous flannel at the four edges of both ends and also at the last edge secured by the thumb tacks, leaving here also a border half an inch wide as on the front edge AB. Now, glue the two flannel borders down, letting the glue run closely along the interstice between the blocks. This secures the line CD of the finished lining shown in Figure 2 to the line C'D' in that figure, and the line EF to the line E'F'. When the glue has set under pressure, remove the thumb tacks. With pieces of pasteboard cut to the two lining curves shown by dotted lines in Figures 1 and 1 bis. mark out these curves in red cravon at the smaller end of the covered blocks, now secured together, one curve on each rectangular face. Run the crayon also along all four longitudinal edges of the covered double block. This is necessary because the lining must be taken off the double block to be further cut and needs to be replaced in exactly the same position for the final glueing on of the forehead and cheek pieces. Now take the clamps out of the blocks and slip the lining from them. Then, at the larger end of the lining, cut the central partition away from the top (forehead face) and bottom (cheek face) of the lining to a point one and a half inches from the end. Then, cut straight across the central partition from the end of one of the previous cuts to the end of the other. Repeat the process at the small end of the lining, with this difference: the cut along the top (forehead face) of the lining should extend to a point one and three eighths inches from the end, and the cut along the bottom (cheek face) to a point two and one eighth inches from the end. After the central partition has thus been cut away at both ends, cut out the lunettes marked out in red crayon on each face of the lining. Carefully replacing the lining blocks in the lining and clamping them and seeing that the ends and the marked edges are exactly in place, put the whole on the bed-block as shown in Figure 5 in readiness for the final glueing on of the forehead and cheek pieces.

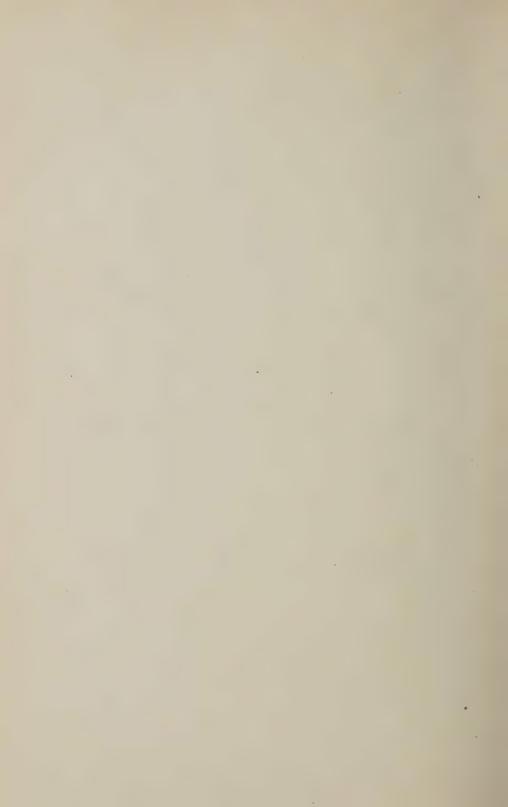
To glue on the forehead and cheek pieces

As the wires in the grooves project slightly above the surface of the forehead and cheek pieces, it is well to have two shallow grooves in corresponding places on that side of the lining blocks to which the forehead piece is to be glued and one on the other 248

side. Mark out the lining curve which appears on the upper face of the covered block on the wired side of the corresponding forehead or cheek piece. Spread an even coat of glue, neither too thin nor too thick, over the whole wired surface up to the lining curve and place this piece upon the covered double lining block, taking care that it is exactly in place. Turn the whole over on the bed-block and glue the other piece to the other flannel surface of the lining in the same way. When the glue has set, remove the weight or clamps used in the process, take out the lining blocks and trim out the strip of flannel which forms the lunette and which has been left as a stay. The skiascope is then finished. If the pressure has forced some of the glue through the flannel and caused it to stick to the blocks, they may be freed by carefully inserting a thin knife. But much the better way is to insert strips of paraffin paper in advance between the lining blocks and the flannel. The glue will not penetrate the paper strips, and they can easily be removed after removing the blocks.

III INSTALLATION

THE IDEAL OF RESTFUL INSPECTION



III

INSTALLATION

THE IDEAL OF RESTFUL INSPECTION

I

MUSEUM FATIGUE 1

The museum in which the photographs here reproduced were taken no longer exists; but the conditions depicted are still well-nigh universal. The museum was the first Museum of Fine Arts in Boston, of which the present great structure on the Fenway became in 1909 the successor. The conditions are those resulting from the type of museum case and of museum installation widely accepted as standards among us.

The photographs were taken with the object of determining by actual observation just what kinds and amount of muscular effort are demanded of the visitor who endeavors to see exhibits as museum authorities plan to have them seen. "Museum fatigue" is an admitted evil, hitherto tacitly accepted as admitting only relief. May not a study of how it comes about suggest some means of prevention?

The method adopted in the inquiry was the following. A series of simple questions was devised relating to certain objects mostly installed at higher or lower levels and in cases; and an observer was photographed in the act of answering them. The observer, an intelligent man with good eye-sight, and well accustomed to museums and their contents, was instructed to answer the questions with the

¹ Reprinted from *The Scientific Monthly*, January, 1916.

least possible exertion and to hold the positions he needed to assume for the purpose until he could be photographed.

The pictures obtained indicate that an inordinate amount of physical effort is demanded of the ideal visitor by the present methods in which we offer most objects to his inspection. It is at once evident that these methods form an effective bar to the adequate fulfilment by museums of the public function they aim to perform. Not even the hardiest sight-seer will long go through with the contortions which the pictures indicate are needed for any comprehension of much of what we display to him. After a brief initial exertion he will resign himself to seeing practically everything imperfectly and by a passing glance. If the public is to gain more than a minute fraction of the good from museum exhibits which is theirs to give and which now can be gained by the private student, radical changes in our methods of exhibition are imperative. As at present installed, the contents of our museums are in large part only preserved, not shown.

Indeed, we may even go further and claim that in some proportion of the objects put on public view in every museum the qualities for which they are shown are rendered wholly invisible by the way they are shown. They are so placed and in such lighting that it is a physical impossibility by any exertion of limb or eye to descry the particular characteristics to which they owe their selection for show. This is literally an absurd state of things; yet there would be little risk in offering to point out to any museum curator objects so concealed by their installation in his own museum.

On the other hand, a proportion of the objects in every museum may be adequately seen without any marked exertion. These are the instances in which objects are installed approximately on a level with and near to the eye of the visitor as he stands upright before them. They constitute a minor fraction of museum installations, and are not represented in the accompanying illustrations. Our present purpose is to inquire into the larger proportion of instances in which adequate seeing demands exertion.

The questions and answers here follow, grouped according to the types of attitude represented in the illustrations. The cases called floor cases are from six to seven feet high, two and one half to three feet broad, five feet long, with a main floor at about thirty inches from the ground, and supported either on legs or on a closed lower compartment.

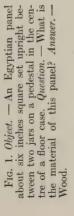
These pictures indicate that the principal sources of that part of museum fatigue which comes from muscular effort to see objects well are two: (1) low installations in upright cases; (2) broad installations in flat or desk cases. High installation may put objects out of sight, but is a minor source of fatigue; while to bring the eve within seeing distance of low shelves is apt to demand bending the knees; and the effort to see objects at the back of wide desk or flat cases requires bending at the hips. The pictures indicate further two ways in which objects may be exhibited in museum cases so as to make invisible some or all of the features which warrant their exhibition. They may, first, be concealed in part by others. They may, second, be placed too far back from the glass to be seen in the necessary detail. The effort of the eye muscles cannot be directly shown in pictures, but is evidently considerable and may be hopeless.

The inferences are that museum fatigue would be greatly helped were upright cases to stand higher, flat and desk cases to be made narrower, and all cases shallower from front to back. This shallowing would put an end to

the concealment of one object by another by putting an end to the exhibition of multiple rows of objects on the same shelf. All cases would be single row cases. The shallowing would further bring all the contents of a case within the limits of close scrutiny. These inferences from the present experiment may be made more precise by others based on measurements of the human body and of the contents of museum shelves. Estimating the height of the average visitor at sixty-three inches, his eye will be about sixty inches above the floor and his hip joint about thirtyeight or thirty-nine inches. For the minutest inspection of a work of art, as for reading fine print, the eve should not be more than about twelve inches from it. The distance forward of a perpendicular from the feet, to which the eye may easily be carried by bending the body from the hips, is not over about fifteen inches. Of the objects commonly preserved in cases in our museums, but a small fraction, perhaps hardly more than a twentieth, are over twelve inches in diameter. Of objects of the nature of ornamented surfaces in frames or settings, or otherwise needing to be seen only on one side, but a smaller proportion are more than two or three inches from front to back.

From these figures approximate dimensions for cases which shall reduce the muscular effort of good seeing to a minimum may be deduced as follows: The lowest exhibition level for case objects should not be more than eighteen inches below the average eye, or forty-two inches from the ground instead of thirty inches or less, as often at present. This would be the indicated height for the bottom of upright cases and the front level of desk or flat cases. The use of the base compartment of cases for exhibition should be given up. The breadth of flat cases should not be greater than about eighteen inches, instead of twenty-eight inches or more as at present. Desk





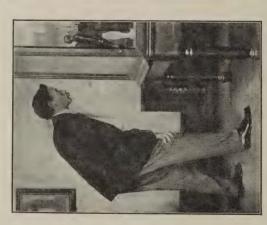


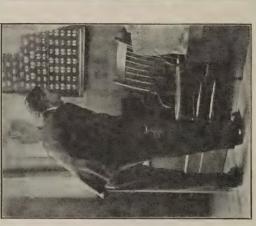
I. Bent. (a) Hands Behind Back

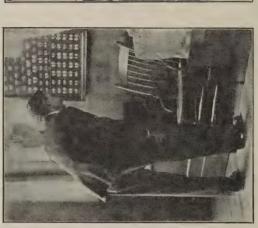
Fig. 2. Object. — Chinese bronze mirrors exhibited in a wall case. Q. — Describe the pattern of one of the mirrors in the lowest row. A. — A central knob in a square, with knobs about and other patterns.



Frg. 3. Object.—A print displayed in a desk case. Q.—What are these children running away from? A.—A dog.







(b) Hands on Knee or Otherwise Supported

Fig. 4. Object. — An Egyptian statu-ette of gold, about three inches high, on a stand on the centre pedestal of a floor server was asked to inspect this object and to read its label. case, behind an upright lens. The ob-

ductions of Greek coins in a frame hung against the wall. The observer was asked to read the label of a coin in one of Fig. 5. Object. - Electrotype reprothe lower rows.

Fig. 6. Object. — A painting by Meisis represented on the horse's crupper? A.—A blanket rolled up. painting was hung on the line. Q. - What sonier representing a horseman.







(b) Hands on Knee or Otherwise Supported Frg. 7. Object.—A Greek coin exhibited toward the front of a flat case. Q.—Describe the device on this coin. A.—A cow licking her hind foot.

Fig. 8. Object. - Plaster impressions from engraved Greek gems, exhibited in a flat case. Q. — The observer was asked to describe the device on one of the gems in the centre of the case. A. — Two goats.



II. MUCH BENT

Frg. 9. Object. — Greek dagger handle with carved top, lying in the centre of a desk case. Q. — Describe the carving. 4.—It represents an animal devouring a ram's head.





II. Much Bent

Fig. 11. Object. — A fragment of ornament lying on the bottom of a floor case. Q. — What does the pattern on this fragment represent? A. — A group of five persons dancing.

and bearing an incised design. The observer was asked to describe the design.

4. — The figure of Christ.

Fig. 10. Object. — A Renaissance crucifix lying on the bottom of a floor case,

Fig. 12. Object. — A cast of the Venus of Melos. The observer was asked to read the label on the pedestal.

is the label on the pedestal.





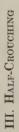


Fig. 13. Object. — A fragment of a relief on wood lying flat on the bottom of a floor case. Q. — What is represented on this relief? A. — A bird.

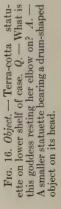
Fig. 14. Object.—A crystal ball on a carved metal pedestal in a floor case. Q.—What does the pedestal represent? A.—Cliffs, with houses and trees.



IV. CROUCHING

Frg. 15. Object.—Engraving after Canaletto in the lower row of a wall-case. Q.—Is the space in the centre land or water? A.—Water.







IV. CROUCHING

Frg. 17. Object. — English posset cup in the base of a floor case. The observer was asked to read the label.



Frg. 18. Object. — A Greek vase on lower shelf of case. Q. — Describe the design on this vase. A. — A rough vine pattern.



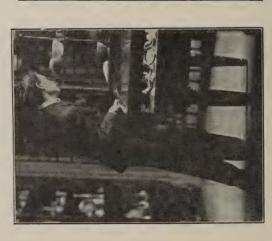
Fig. 19. Object. — Cast of the Laocoon. The observer was asked to read the label.



IV. Crouching
Fig. 20. Object. — Drawing of the
Propylea on an easel. The observer was
asked to read the label.



Fro. 21. Object.—Drawing of the sculptures on the western pediment of the Parthenon, installed on the pedestal of the casts reproducing their remains. Q.—Describe the figure farthest to the right. A.—A youth lying down.



V. Twist

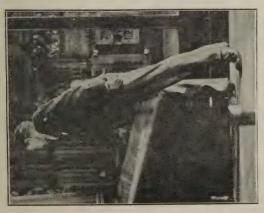
Fig. 22. Object.—A fragment of Arretine pottery lying near the end of a desk case. Q.—How many musical instruments can be seen in this group? A.—two: harp and pipes.



VI. LOOKING UP

Fra. 23. Object. — A landscape hung high. Q. — Is the sky clear or cloudy? A. — Overeast.

Frg. 24. Object.—A textile hanging over a wall case. Q.—Has the upper border the same pattern as the lower? A.—Yes; but reversed.



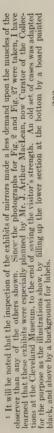
VII. STRETCHING FORWARD

Fro. 25. Object.—Statuette on a bracket back of a desk case. The observer was asked to read the label.



VIII. STRETCHING UP

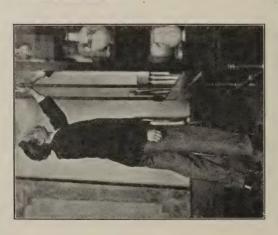
Fig. 26. Object. — A vase on upper shelf of case. The observer was asked to read the label and notice the pattern.





VIII. STRETCHING UP

Frg. 27. Object. — Chinese bronze mirrors in a wall case. Q.— Describe the pattern of one of the mirrors on the top row. A.—A central knob in a square with knobs about and other patterns.







IX. CLIMBING UP

Frg. 30. Object.—A cast of a head of Hera hung high on the wall. The observer was asked to read the label. A.—I can read the large letters, but not the small.

VIII. STRETCHING UP

case. Q.— How many wounds are there in this decapitated head? A.— Five. Fig. 29. Object. — A small ivory carving (netsuke) on the upper shelf of a floor Fig. 28. Object. — A vase on the back row of the upper shelf of a case. Q — Is there a pattern on the neck? A. — Yes, bands of horizontal lines.

(inclined) cases may be somewhat wider. Beyond these limits the eye cannot easily be brought within close seeing distance of the back of the case. The depth of flat or desk cases from the glass to the bottom should not be greater than from two to four inches, instead of from six to twelve inches as at present. A depth from front to back of four inches would often also suffice for wall cases, instead of from sixteen to twenty-four inches as at present. Six inches might be regarded as their maximum supposing them used to receive only objects seen to full advantage from one side. The depth of upright floor cases from front to back should not exceed twelve inches. A smaller standard depth of eight inches would probably also be found useful. Upright floor cases or wall cases might be seventyeight inches high instead of one hundred or more as at present. It is true the bottom of an object twelve inches high installed at the top of such a case with three inches above to spare would be three inches above the average eye, and the top fifteen inches. But since, on the twelveinch shelf assumed, all parts of the object would be within six inches of the glass, it would all be within practicable seeing distance, although only the lower part could be closely examined.

The stability of floor cases a foot or less in breadth and six feet six inches high would require to be secured by special means. If the legs were perpendicular, they would need to be fastened to the floor, otherwise they would need a wider bearing by extended feet; or a removable bar at the top of the case connecting it with another might be given a design in harmony with their framing and join the two into a stable pair.

One result of the use of shallower cases would be that there would be less waste space within them. At present the space within a floor case of the usual broad dimensions is only very partially used. The exhibit is generally arranged in a pyramidal form of which the lower levels are seen against the successive steps of an interior pedestal and only the top row is shown above it and can be seen on all sides. All the space above the lower rows of objects is empty. In the narrow case proposed there would be in general no pedestal, but shelves alone. There would be no empty space above any row of objects and every object would be visible from all sides. Since a larger number of cases could be placed in a given area, another result would be that a greater proportion of museum objects would be exposed to view on all sides. An economy of case-space would be coupled with a completer showing of case-contents.

Such changes would make a radical difference in the appearance of museum galleries. They would be fitted with a number of small cases, very shallow and standing but not reaching high, instead of a few large ones, broad, set low and rising higher. Wall cases would shrink to one quarter their present depth, upright floor cases to one third their present depth and to a less average height, and desk and flat cases to three quarters their width and one third their vertical depth. Delicate, instead of heavy, construction would be the rule. The exhibits would be shown spaced and unobstructed instead of grouped into decorative pyramids or serried ranks. The small fraction of objects which are over twelve inches in diameter would be installed either in the open or each in its separate case.

Nevertheless, there would remain opportunity within the cases for the more or less advantageous showing of more or less meritorious objects. The upright cases on the floor and the wall would still have a *piano nobile*, or main level, in the space directly opposite the eye. Between a bottom at forty-two inches above the floor and a top at

seventy-eight inches, there would be thirty-six inches of space which, if divided by two shelves giving three spaces of about a foot each, would offer three gradations of prominence: first, the middle at fifty-four to sixty-six inches, because seen without effort by the average eye at sixty inches; second, the lowest, because perfectly seen at fortytwo to fifty-four inches by inclining the body a few inches; and third, the uppermost, from sixty-six to seventy-eight inches, because seen simply by raising the glance, although inaccessible to the closest inspection. If divided by a central shelf at sixty inches, the upper space of eighteen inches would be the piano nobile, because the lower and generally more important part of the object would be open to close inspection without fatigue. On the under shelf, only the upper and generally less important part of an object could be studied without bending.

In cases such as these museums would, for the first time, possess veritable show cases. Hitherto these indispensable protective devices have in reality been glazed storage chests valuable primarily for their capacity. Their wide shelving with double or triple or multiple rows of objects is a survival from the days when museums were thought of as magazines where things were kept in safety ready for inspection when needed. Such shelving has no real place in these days of serious attempts to deal with the problems of public show.

The present argument is not the first that has been offered in support of narrow cases; nor are they unknown in newer museum installations. Mr. Lewis Foreman Day wrote a few years ago: "Museum cases are nearly always too big — and especially they are much too wide." One argument against deep cases is, "that the things at the back of them (and in the centre of square cases) are reduced to background. Another is, you cannot get close

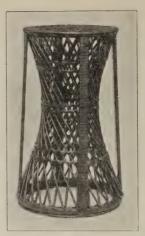
enough to see things properly. . . . Think what a big vase you can put on a mantel-piece from nine to twelve inches wide, and you will realize how seldom it is necessary to have cases much wider than that. . . . Some of the cases at Munich are not more than nine inches deep, and it is astonishing the size of the objects they hold." ¹

The smaller shelf-widths which Mr. Day notes at Munich have come into occasional use also in other museums, American and foreign. In Boston the show-space tends also to be set higher.

The reduction in the cubic contents of museum cases here advocated, in harmony with Mr. Dav's suggestion and newer practice, is the second radical improvement in these fixtures since public museums were instituted. The first is an improvement from the point of view of the museum; the second from the point of view of the visitor. The device known in Europe as the Reichenberger case (due to Dr. Gustav E. Pazaurek, Director at the time of the North Bohemian Museum of Industrial Art), and in America as the Boston case (independently invented with a different mechanism by Mr. W. W. MacLean of the Boston Museum), consists in opening a case by lifting its top with a windlass instead of unlocking its doors with a key. This was a proposal in the interest of the security of the contents from dust, damp, and theft. The reduction of the size and particularly of the depth of cases is a proposal in the interest of the easy visibility of their contents. By making also this second advance in the construction of these necessary fixtures, the museum would be in a position to fulfil more perfectly both of its essential functions, first as guardian and then as expositor of the treasures committed to its charge.

¹ Lewis Foreman Day, F.S.A., "How to Make the Most of a Museum," *Journal of the Society of Arts* (January 10, 1908), p. 153 f.

The use of smaller cases has for a corollary a reduction in the number of objects shown simultaneously. It would be another step in the pathway which modern museums have already entered upon in dividing their contents into show and study series and in alternating objects between the two. The era of smaller and changing exhibits is also an era of better exhibition.



A MUSEUM TABOURET

Π

SEATS AS PREVENTIVES OF FATIGUE

WE are at sea on the question of the best way to provide seats in a museum until we catch sight of the truth that their foremost office is not to restore from fatigue, but to prevent its advent. They are most useful, not when they afford the greatest ease and when they most exempt the visitor from the temptation to go on examining things. but when they afford just enough ease to make it comfortable to go on looking and are conveniently distributed among the exhibits for this purpose. Do we attend plays and concerts to stand up during the performance and sit down during the entr'acte? Is not the reverse the case? Why, then, should we go to see pictures and statues expecting to stand while looking at them and sit down when nature demands an interval of rest? To come into the clear about the proper kind and placing of seats in museums, we must get rid of this exclusively therapeutic theory of their office and take up the prophylactic theory generally adopted when we inspect works of art elsewhere. People have long thought prevention better than cure; but

have neglected the patent opportunity to apply the maxim which the fatigues of museum visits offer. To embrace this opportunity is to work for efficiency in exhibition: the next forward step in museum management, succeeding the epoch when immensity and multifarity of exhibits were the aims heedlessly sought. In this limited, but all-important matter of provision to keep the perceptive powers of visitors in all possible freshness, we must see to it that seats should in the main be supports rather than lounging places and should be abundantly distributed where exhibits can be adequately seen from them.

The seats customarily provided in museums meet neither of these requirements. They are apt to be cushioned ottomans inviting to repose; and to be so placed either in the centre of galleries or along walls that nothing but a general view of the exhibits can be obtained from them. So placed they have their manifest use. Yet the positions chosen are often such that sitting down one becomes a cynosure; when one wants and ought to remain a neighboring eye.

The failure hitherto of museums to regard seats as means preventive of fatigue has a very evident cause. We do not stand up during concerts or plays because they can be easily brought before our ears and eyes as we sit. We do stand up generally in looking at museum exhibits because we must wander among them to see them. But this handicap on museums need not prevent their provision of seats in convenient positions for looking at chosen objects; nor the provision of movable seats for the use of those who may wish to make their own choice of what they shall see at their ease. There must be definite efforts in two directions: first, the provision of a new unit of exhibition consisting of exhibit plus seat from which to inspect it in comfort; second, the provision of

easily movable seats scattered among the exhibits in such a way as to permit of their use at will for the same purpose.

Unless by rare exception these simple expedients have as yet never been attempted in museums; another instance of the rudimentary stage in which the art of public exhibition yet lingers. The discussion, therefore, cannot yet appeal to experience; and the immediate task is that of suggestions toward reducing theory to practice.

The establishment of the new unit of exhibition — an exhibit plus a seat — apparently would call for a considerable modification of existing methods of arranging cases. The unit must be so placed as not to obstruct the free passage of other visitors. This demands space and an outlying position, either central or along a wall. The position along a wall has the advantage of possible nearness to a window in the wall and suggests the possibility of lowering its sill so as to give light both stronger and more pleasantly directed. Nevertheless, an almost insuperable objection exists to the use of low side light in museums, in the dazzling and often insupportable glare, direct and reflected, which it throws into the eyes of visitors moving about. It is evident that any low window used for lighting the proposed unit must be alcoved or otherwise prevented from destroying the visibility of other objects beside that shown in the unit.

Movable seats in museums are commonly provided in the form of chairs arranged along walls or placed in groups in the centres of galleries. The arrangement along walls presupposes either that the visitor will be willing, for purposes of rest, to make himself an animate exhibit, or will take the trouble and has the assurance to move the chair. This presupposition attributes more initiative and more

boldness to visitors than most possess. The chairs, moreover, are apt to be heavier than can conveniently be moved. Their usefulness along walls may therefore be regarded as minimal; and experience confirms this judgment. Central in a room, the backs of chairs are conspicuous and may interfere with the view of objects among which they are placed. What is wanted in the way of movable seats is some form of tabouret or chair without a back. This would at once be lighter and less conspicuous. It would also be less restful; but if what we seek is a means of forestalling fatigue rather than recovering from it, tabourets need not be condemned on this account. Further, it is the backs of chairs that suggest the absurd plan of arranging them along walls where no ordinarily constituted person would ever want to use them. Seats without backs, or tabourets, are equally in place in any part of the room. Moreover, in a room like a museum gallery which is apt to contain more or fewer show cases standing on legs, a place offers itself under the cases for storing the tabourets when not in use. So put away, they would be near at hand when needed, while practically out of sight meanwhile. Doubtless it would take years for museum visitors to become as accustomed to finding and making use of tabourets under cases as they now are to other museum appliances, such as catalogues or labels. Perhaps the guardians in the galleries would have to offer them at first, or perhaps an occasional placard would suffice to make visitors aware of the new facility. The plan seems on the face of it worth trying, particularly if some make of tabouret could be found that would at once be light and strong. A form consisting of a willow or rattan seat shaped like an hour-glass suggests itself. That pictured at the head of this article has been tried with good results at the Museum of Fine Arts in Boston. It is two feet high

and weighs but four pounds. Such tabourets could by staining be given any color that the tone of the gallery demands. It would be the guardians' duty to replace them under the cases, or elsewhere, after use.

The part of wisdom would seem to be to add these two new provisions for rest — the unit of exhibit plus seat and the movable seat or tabouret — to the settees, benches, and chairs already in use. These latter have their indispensable office also as places of rest and reflection upon what has gone or is coming. But used thus they answer only a third of the need they were intended to meet.

The question of seats in museums has an important bearing upon one of the chief puzzles of museum management. The authorities of our art museums have hitherto felt more or less helpless before the problem of the use of the museum by the general public. Daily watching the tired and listless wanderers that chiefly populate our galleries, we see plainly how little they gain compared with what can be gained. We become impatient of the statistics that show the comparatively feeble drawing-powers of exhibitions of pictures, statues, and decorative art. Are such things the affair of the exceptionally educated only? Unfortunately for this belief, the exceptionally educated neglect our museums even more conspicuously than the unlettered. There must be general underlying causes hindering the effectiveness of our permanent exhibitions of art. Pondering this question we have surmised that the great need of the public was preparation of mind for what is shown; and we have accordingly multiplied labels and catalogues and guides; and of late years have developed a new museum service in the guise of personal companionship by docents, instructors, and demonstrators. All these

¹ This tabouret has been manufactured for the Museum by the Heywood Brothers and Wakefield Company of Boston.

things help. Nevertheless, what is more needed is that the works of art themselves shall have the opportunity of making their impression.

Tō do this they require, among other things, time. Looked at in leisurely fashion, most museum exhibits would prove objects of profitable interest, even to those to whom all books of interpretation may be sealed and all lecturing a weariness. No one can remain long among beautiful things arranged in stately halls and wholly fail to enjoy and admire both — that is, to be influenced by them and influenced to the identical good purpose for which they were made.

Viewed from this angle, the problem of the use of the museum by the public becomes a problem of inducing visitors to stay. To make them wish to stay is to make them wish to come for the reward they receive by staying. It does not vet seem to have occurred to museum officials to envisage the problem thus, else they would have already united in a movement to change their galleries from places to stand about in to places to sit down in. To induce a man to stay anywhere, he must be made comfortable while there. With a development in the seating accommodations of museum galleries, we may expect to see fewer wanderers gradually becoming exhausted and more spectators gradually becoming interested. Museums will be more efficient with the public both because people in general will get more from them and because more people will come to get it.

Hence, every museum building and installation should be especially studied with a view to a judicious placing of as many seats as possible therein. Niches and bays must be utilized for chairs and benches. Any furniture exhibited must be distinguished from seats for use by installation upon low pedestals. Central vacant places must become vantage-points from which to look about while seated. Single exhibits must be arranged for study from seats set apart for the purpose. Under all cases containing objects demanding minute inspection there must be light stools which visitors can draw out and drop into for a moment. For the purpose of a movable seat the tabouret here proposed promises well.

IV EXEGESIS

THE IDEALS OF OFFICIAL COMPANIONSHIP AND THE INTERPRETATIVE CATALOGUE



IV

EXEGESIS

THE IDEALS OF OFFICIAL COMPANIONSHIP AND THE INTERPRETATIVE CATALOGUE

Ι

THE MUSEUM DOCENT 1

The Church here is taken for the Church as it is docent and regent; as it teaches and governs. — Century Dictionary, art., "Docent"; from Archbishop Laud (1573–1645).

As docent, the museum is the interpreter of its contents.

The docent office in museums of art.

The permanence of museum collections makes interpretative instruction necessary — Their excellence makes formal methods unavailable — The teacher and pupil are unprepared for it — The disciplinary atmosphere is unfavorable to it — The museum is unfitted either to be a cradle of artistic capacity or a guide to artistic progress — Summary.

A model interpretation of poetry.

Gleanings left for the disciple — A fundamental doubt.

Canons deducible.

Negative.

No gossip — No generalities — No praise — No comparisons — No æsthetics.

Positive.

The removal of misapprehension — The direction of attention: sensory and imaginative.

Maxims for museum use.

History of official interpretation in museums.

Subordinate status of the docent office in museum economy.

A MUSEUM is an institution founded to keep things for show. In the English of the seventeenth century it might be said to fulfil its purpose as it is *gardant* and *monstrant*; as it preserves and exhibits.

To exhibit objects is to do the needful to make them visible. But there are two ways in which things become visible — to the bodily eye and to the spiritual sight. Gazing upon them is one thing, understanding them

¹ Reprinted from the Proceedings of the American Association of Museums, vol. ix. (1915.)

another. To fulfil its complete purpose as a show, a museum must do the needful in both ways. It must arrange its contents so that they can be looked at; but also help its average of visitors to know what they mean. It must at once install its contents and see to their interpretation.

Hence, to express the full duty of museums it will be convenient to use three adjectives, and not two only. Reserving the word monstrant for presentation to the bodily eye, we need another for the sharpening of the spiritual sight. The business of mental preparation is called teaching, and the appropriate adjective is given in the quotation above. A museum performs its complete office as it is at once *qardant*, *monstrant*, and *docent*.

The docent office differs in museums of science and museums of art. We understand a fossil or a machine when we grasp the scientific or technical principles it is shown to illustrate; but whatever historical or professional interest a work of art may have, we do not understand it until we receive from it the impression the artist meant it should make upon beholders. Objects called works of art have meanings in the literal sense. They are one of the forms of human speech, one of the ways in which men utter their minds to one another. A fossil or a machine has meaning only figuratively. The one was not made by man at all, and the other was made, not to tell something to us but to do something for us. It is not enough therefore to understand an imaginative creation as we may understand a discovery or an invention. We must know beside what its maker intended it to tell us; and in order to grasp it as a work of art, this is all we need to understand from it. Its historical or professional significance is no part of the meaning it was made to communicate, however much — or little — either may aid toward the apprehension of

that meaning. The docent duty of a museum dedicated to art is summed up in the revelation of the moods of sense and thought and feeling of which its contents are the records. In so far as it recognizes an independent teaching office, historical or professional, it treats itself, not as a museum of art, but as a museum of science or industry. With a certain danger to its usefulness, let us remember; for, in importance, a knowledge of the historical and professional principles illustrated in a masterpiece are to an acquaintance with the masterpiece itself as the crackling of thorns under a pot to the meal cooked by their burning.

The art museum as docent aims to help us read works of art as we would read books; that is, to help us divine what their authors meant to say. A sensible remark of an old-time museum official was in effect a call for the service: "The larger the number of those who can appreciate art, the broader and surer the foundations on which the future of its excellence can rest." 1 For the understanding of this office two facts are of prime importance. The docent duty of a museum of art is not an accidental obligation, which it may or may not be called upon to fulfil according as its community is more or less instructed. It is a necessary obligation grounded in the nature of a museum as a permanent exhibition. Further, the docent duty of a museum of art is not of a piece with the education of the school, but radically distinguished from it by the selective nature of museum contents.

A museum is ultimately responsible for certain teaching because it preserves things indefinitely. Any permanent exhibition comes sooner or later to contain objects out of date, and the older it grows, the more it contains and the

¹ Edward Edwards, Administrative Economy of the Fine Arts (London, 1840), p. 98.

more out of date some of them become. The fullest understanding of these objects demands in the spectator a sympathy with the past; a sympathy in part, and always in major part, spontaneous and not to be attained by taking thought, but in part also, and often in necessary part, capable of attainment by premeditated effort, by what we call instruction. Such instruction it is the duty of a museum to assure to its visitors, whether by imparting it directly or by seeing that they can obtain it otherwise. Every museum of art, by its nature as a keeper of things for show, creates a certain educational need, and assumes a certain educational obligation auxiliary to its ultimate purpose.

Again, the education obligatory on a museum of art because of the stability of its collections differs radically from the education of the school because of their quality.

The school stands by its nature for relative excellence. School teaching is at once constrained to a secondary aim, and adapted to secondary powers. Collective instruction, or teaching imparted to a number of persons at once, cannot convey to all an equal comprehension of its theme, owing to the different teachableness of different intelligences. President Wilson, quoting a former colleague, has just reminded us that "the human mind has infinite resources for resisting the introduction of knowledge"; and within the finite resources of the teacher of a class is only the introduction of so much as may qualify his scholars generally to answer a limited set of ques-

¹ René Bazin, in L'auvre littéraire d'Eugène Fromentin, writes: "He never suffered from that premature pruning to which we are subjected by school life—shut in, common to all, identical for natures so profoundly diverse that no one ever had the idea of sowing in one flower bed so many species of tulips, beets, mignonette, poppies, onions, primroses, heliotropes, as there are temperaments grouped in a class of children. A necessity, I willingly admit. But so much the better for those that escape."

tions. The instruction of the school tends unavoidably to aim not at education but at graduation. A man of science uses the expression, "a teacher only, with no ambitions beyond enabling his classes to pass their examinations." Again, the recipients of school instruction are customarily the young. It is addressed not to intelligences at the height of their powers, but to intelligences in process of development. Education, technically so-called, aims both at applying incomplete tests, and at applying them to immature minds. As well by its method as by its field, the school from primary to professional stands for relative excellence.

The museum of art stands, on the contrary, for absolute excellence. It seeks to preserve only the best of the past. As docent, its duty is to aid its visitors, by the use of whatever means prove most effective, to assimilate certain of the highest achievements of minds at once mature and especially gifted. This purpose implies a docent and a disciple but neither a teacher by profession, nor class nor course nor recitation nor examination. It can be fulfilled only by a return to the natural sequence of question and answer between pupil and instructor.

The order is reversed in the attempt to teach classes in courses. The education of the school consists in answering questions before they are asked. Education really efficient consists in letting answers follow questions. This is the method of all the greater teachers of mankind. The distinction lies between collective teaching, compelled to aim at examination, and individual teaching, impelled to aim at explanation. The method of examination disregards, the method of explanation observes, the mental principle according to which we see only what we are looking for. It is the questions are supported to the school of the schoo

¹ Professor E. C. Pickering in Science, vol. XLI (1915), no. 1051.

tion in the mind of the learner that makes what he learns part and parcel of his mental equipment. The preliminary act, that of the delivery of the message, may be compared to the sowing of seed, in itself a barren deed. Education proper does not begin until the seed germinates in the arrest of some pupil's attention. The question follows, not as in the school, from the teacher, but from the pupil; and the answer to the question, not as in the school, given by the pupil, but contributed by the teacher, is the fostering care under which the seed once germinated may bring forth, some thirty, some sixty, some an hundred fold.

The use of this natural method hampers the school in discharging its obligation to graduate; but forwards the museum in discharging its obligation to educate. The highest achievements of men at once mature and especially gifted are what the museum has to impart; and the watchword of its docent task must be: "He that hath ears to hear let him hear." Uttered on behalf of beauty, this summons has the same universal range it had when first spoken. The museum offers itself as docent not to a privileged few, but to every one according to his points of contact with the treasures it displays; and such points of contact, of one or another kind in infinite variety exist in every one. Amiel has said: "The supreme finesse in teaching consists in knowing how to suggest; and for this the teacher must divine what it is that interests." The museum cannot teach under all conditions, but alone when one or another interest is awake in one or another visitor. In the nurture of these individual interests lies its office as docent.

The inappropriateness of school methods — the professional instruction of a class in a course by recitations and examinations — to this office manifests itself in four

¹ Journal Intime, vol. 1, p. 203.

ways. First, in the dulling of the sense of perfection in the docent representatives of the museum. The hard intellectual labor of applying halfway standards to undeveloped minds inures the spirit to imperfection; and whoever the disciples and however taught, the docent function cannot to good advantage be performed as an exclusive office. The education given by a museum of art should always be the partial occupation of persons engaged also in productive labor in competition with equals. Even the whole body of those whose daily duty it is to keep and augment and study its collections may not suffice for the work. The appeal of every object of art is to the spiritual kin of the artist, and he may often lack blood relatives on the staff. Is any outsider available to whom the work speaks in a mother tongue, and who can to practical effect speak of it to others, the museum must seek him also as its representative. Only thus can the sense of perfection, which is the condition of the understanding of a work of art, spread from its teachers to their hearers.

Second, the use of school methods by a museum misdirects its docent work. School methods are adjusted to the needs of youth; works of art are not. They were not made by children, nor, unless by exception, for children; and no aid can enable children to comprehend them fully. Carlyle's description of a boy's awakening to the beauty of nature applies still more pointedly to the beauty of art. It was "still a Hebrew speech for me; nevertheless I was looking at the fair illuminated Letters and had an eye for their gilding." ¹ The museum that treats its docent office as a duty chiefly owed to youth stints the children of a larger growth who could best profit by its instruction. Dr. Goode writes of museums in general: "I should not organize the museum primarily for the use of the peo-

¹ Sartor Resartus.

ple in their larval or schoolgoing stage of existence. . . . School days last, at the most, only from five to fifteen. vears, and they end with the majority of mankind before their minds have reached the stage of growth most favorable for the reception and assimilation of the best and most useful thought." 1 School classes marshalled through museum halls may afford gratifying statistics, but the invisible census of educational result would make the judicious grieve. The practice in museums of art has the same foundation and the same limitations as the attempt to make monuments of literature into subjects of school instruction. Jules Lemaitre has written: "The soul of a little child well-endowed is nearer Homer than the soul of this or that bourgeois or this or that mediocre academician." The remark accuses modern life, both the business and the scholastic life, of destroying the freshness of feeling and naïvété of apprehension which inspired the Iliad and the Odyssey. Freshness and naïvété are, indeed, conditions necessary for any understanding of a work of art; but they are not conditions sufficient for its assimilation. The soul of an artist can be evoked from his work only by his spiritual peers. Dante, addressing Virgil, says: 2 "Thy noble words honor both thyself and those who hearken to them." But school boys since have seldom hearkened. Many, like Byron, lose even the capacity to hearken.3

"Then, farewell, Horace; whom I hated so,
Not for thy faults but mine; it is a curse
To understand, not feel, thy lyric flow,
To comprehend, but never love, thy verse."

An Indian saying compares the artist to the moon which can draw the sea but makes no appreciable difference in

¹ G. Brown Goode, "The Museum of the Future," Annual Report of the Smithsonian Institution (1897), part II, p. 249.

² Inferno, II, 113, 114.

³ Childe Harold, Canto IV.

the level of a well; and, it may be added, can move neither if frozen. The dulling of the sense of perfection which handicaps the teacher by profession needs no proof more irrefragable than is given by school editions of many literary classics. To attempt to put within adolescent grasp masterpieces embodying the utmost reaches of thought and refinements of expression, the fruit of the richest experience, is treachery to art in the museum as in the class in literature. The practical necessity of expurgation in both cases should be warning enough of the unwisdom of the enterprise. To the adolescent the sex-impulse is but just beginning the long course of its irradiation through the whole of life which fills the consciousness of the adult with ineffable echoes "from Heaven across the World to Hell" — as Goethe describes the action of Faust.¹ To place before a boy or girl a work of art containing, as most do, ingredients from this all-compelling and all-comprehending fact, is to invite its misunderstanding. Whether the process may not morally weaken also is often an open question. There is solid psychological ground for the objection, intemperately voiced from time to time by a few fanatics, to indiscriminate museum visits by school classes. The peril should not be blinked by museum authorities, but should suggest the inquiry whether the whole "educational racket" — as the profane might term the attempt to turn school children into habitués of museums - does not rest upon an assumption due simply to mental inertia — the assumption, namely, that whatever the adult can assimilate to his profit, can and should be presented and expounded to the young.

Third, the use by a museum of school methods devitalizes its docent work. The purpose of the docent is to lead his disciples on to enjoyment. A work of art is the em-

¹ Conversations with Eckermann.

bodiment of a creative joy, or as a work of art it is worthless; and to get it enjoyed as it was made to be enjoyed is the be-all and the end-all of museum instruction proper. The purpose of the teacher is to impart knowledge; a divergent aim, and under school conditions in a measure incompatible. The "Cicerone" of the Swiss critic Burckhardt in its original form was the written discourse of a docent-at-large in Italy. The docent purpose is exactly expressed in the sub-title of the volume — "Eine Einleitung zum Genuss der Kunstwerke Italiens": "a leadingon to (or introduction to) the enjoyment of Italian art." But in posthumous editions the accumulated erudition of many editors, succeeding the free play of a sensitive mind, obscures to the reader the happy temper in which it first was written. The scholastic atmosphere is in three ways hostile to the mood of joy. The contagion from the instructor is more or less in default. To guide learners along well-trodden paths of truth is far from the thrilling pleasure that Bacon, after Lucretius, found in standing on its vantage ground. Again, the scholastic atmosphere is an atmosphere of more or less compulsion, and again, of more or less self-consciousness. Collective instruction presupposes uniform exercises, none exactly responding to the needs of any pupil; and the shadow of the pedagogic disapproval chills the spirit turned inward upon the thought of its own relation to a standard. Unless a museum is to fail essentially in its teaching office, its instruction must be accomplished in holiday mood, without drudgery for the docent, and without tasks or tests for the disciple.

Finally, the use of school methods in a museum fosters a misconstruction of its docent obligation. Since schools are founded to impart systematic knowledge or practical skill, the museum may easily be thought bound as docent

to teach the history, principles, and practice of the arts it represents, or even to exert a commanding influence on their current development. Yet both ideas are misconceptions, the first excusable, the last egregious. As a permanent public exhibition a museum is bound to see that its community has access to means of understanding its exhibits. But the teaching of the various disciplines they illustrate, theoretical and practical, is a wholly different business, without basis either in gardant or monstrant functions. The mistake of confusing it with them is excusable because the obligation to see that works of art are publicly understood has awaited the creation of institutions to preserve them for public benefit. Before museums existed the artistic public, the spectator, the other half of the incomplete being we call an artist, had no official representative. Instruction in art meant only the inculcation of art history and theory and the training of embryo painters and sculptors. The fine art of beholding grew wild. To-day museums are founded everywhere in this country in younger communities with only the scantiest opportunities for the upbuilding of permanent collections of fine art. So placed a museum becomes less an exhibition than a centre for artistic interests of all kinds: and its docent office presents itself as the duty of theoretical and technical instruction. Nevertheless, the condition is ephemeral, the sign of an undeveloped machinery of civilization. It joins functions alien in method and scope, and in a measure antagonistic. The museum as docent teaches objects; it instructs toward its exhibits. As the purveyor of general knowledge about art, it teaches subjects; it instructs from its exhibits. Again, a museum official's duties cover many fields beside the history and theory of art; and the history and theory of art cover many fields beyond the collections in his care. A further

radical difference separates an exhibition from a school of practice. The one belongs to the contemplative life; the other to the active life. The museum is the home, not of the artist — the creator — but of the critic — the spectator. The museum is catholic in spirit; the technical school separatist. The judgments of artists, one upon another, are, as Stendhal suggested, so many "certificates of resemblance." 1 Technical instruction tends to make the museum one-sided; the museum to make technical instruction superficial. These are the conclusions of experience. Of the combination of other functions with that of the museum, Mr. Hedley writes: "Museum evolution tends toward specialization; the narrower its limits, the higher the grade an institution generally reaches." 2 Of museum buildings Dr. Pazaurek writes: "It is a question seriously to be discussed whether in planning art buildings de novo the union of school and museum, by some thought absolutely essential, is really to be recommended. Experience seems often to teach otherwise, for where they have been under one roof either one or other has suffered.... Either the museum has flourished and the school vegetated in secret, or — under another management — the school has taken a great start while the museum has sunk to the level of a neglected school-collection. When this subject is considered dispassionately and thoroughly, these twins that only too easily grow together will in many cases be separated betimes, and two entirely distinct buildings erected." 3 From this counsel, as from the principles involved, the inference is that while freely offering its aid to schools, both theoretical and technical,

¹ Histoire de la peinture en Italie, vol. 11 (Index).

² Charles Hedley, Museum Administration in the United States, Australian Museum, Sydney, Miscellaneous Series, vol. VIII (1913), p. 30.

³ G. A. Pazaurek: "Museumsbauten," Wiener Bauindustrie Zeitung, Jahrgang 20, no. 40. (1903.)

the museum will best perform its essential duty under separate management.

The other misconception of the docent office of museums — that which assigns them the high duty of presiding over the artistic production of their time and place — rests upon a beclouded notion of how the artist works. He sees through other eyes only to use his own to better advantage thereafter. Only in the measure in which he can take up into himself what others have wrought will his own work bear comparison with theirs. To guide him after preparatory years would be a fatal impertinence in any institution. These are commonplaces of the psychology of fancy, illustrated in the past at every alternation of artistic decadence and rebirth. Lowell writes of "the fact. patent in the history of all the fine arts, that every attempt at reproducing bygone excellence by external imitation of it, or even by applying the rules which analytic criticism has formulated from the study of it, has resulted in producing the artificial and not the artistic." 1 The return of the artist to nature means a transition from the contemplation of that which has pleased others to the discovery of that which pleases himself, and out of this immediate joy every viable product of fancy springs. Museum officials as arbiters of what he should paint or carve would be even more hopelessly out of place than students of literature as arbiters of what he should write. Museums have no mission to make the fame of artists. They are founded to secure it when made by the interested public.

The docent office of the museum, conditioned by these results, thus outlines itself. Mindful of its purpose to aid toward the spiritual assimilation of some of the highest things, it should aim not at attainment, but at progress,

¹ J. R. Lowell, Literary Essays, "Swinburne's Tragedies."

not at graduation, but at education. It should be carried on, not as the sole office of a few persons, but as the duty on occasion of many chosen representatives. It should address itself chiefly to minds already mature and only under restrictions to children. It should be undertaken in the spirit of free intercourse, not in that of compulsion, in the spirit of play and not of work, seeking to offer not what the docent wants to teach but what the spectator wants to know. It should not ally itself with technical instruction, and above all should renounce the ambition to control the productive artist whether through patronage or criticism.

What, then, shall the museum as docent say? Of what subject matter shall its speech consist? Let us take as a guide the words in which a living poet leads on his readers to the enjoyment of a poem by a foregoer. Having the work of art itself before us we can follow his method as we could not were we to quote the exposition of a picture or a statue.

The introductory chapter of M. Auguste Dorchain's volume, "L'Art des Vers," instead of beginning at once the technical study of versification to which the book is to be devoted, essays by an example to quicken the reader's sense of the nobility and power of poetry. Before seeking to impart a knowledge of the art, the author seeks to awaken a love of it.

Compose yourself a moment. Close your ears to the noises which rise from the street; forget some of your petty cares; let subside within your soul like dregs everything which since you woke has cumbered, defiled, or at least dissipated your mind—the reading of a useless newspaper or empty book, trifling talk, an idle call. Then go to your bookcase; take from its shelf the *Orientales* of Victor Hugo; open it at the thirty-seventh number; and, deliberately articulating each syllable, observing each period and comma as you would the

¹ Paris, 1905.

rests and glides of a musical notation, read this poem in two strophes: 1

EXTASE

J'étais seul près des flots, par une nuit d'étoiles Pas un nuage aux cieux, sur les mers pas de voiles. Mes yeux plongeaient plus loin que le monde réel. Et les bois, et les monts, et toute la nature, Semblaient interroger dans un confus murmure Les flots des mers, les feux du ciel.

Et les étoiles d'or, légions infinies,
À voix haute, à voix basse, avec mille harmonies,
Disaient, en inclinant leurs couronnes de feu;
Et les flots bleus, que rien ne gouverne ni n'arrête,
Disaient, en recourbant l'écume de leur crête:
— C'est le Seigneur, le Seigneur Dieu!

M. Dorchain then examines each line:

J'étais seul près des flots, par une nuit d'étoiles

In this first line, which could not be imagined more perfectly simple, the whole scene is already evoked and established; the man, the place, and the hour. And this line, delayed in the middle by a considerable pause, and indefinitely prolonged as by an organ point, thanks to the final word étoiles, is all-sufficient in itself to balance any developments with which it might please the poet to follow it. Suppose a moment that he had begun the poem thus:

Près des flots j'étais seul, sous un ciel étoilé

This would have the same sense, yet there would be left nothing, absolutely nothing, of what could be called poetry. Flots and étoiles are the two essential words of the poem, those whose ap-

¹ The poem may be verbally rendered as follows:

I was alone by the waves on a starry night
Not a cloud in the skies, not a sail on the seas.
My eyes saw beyond the real world.
And the woods, and the mountains, and all nature
Seemed to question, in a confused murmur,
The waves of the seas, the stars of the sky.

And the golden stars, infinite legions,
With voices loud and low, in a thousand harmonies,
Answered, bending their crowns of fire;
And the blue waves, that nothing governs nor stays,
Answered, curving the foam of their crests:
It is the Lord, the Lord God!

position and opposition are to form its whole architecture. The word flots falls on the hemistich (halfway point) only in the line of the master, and the comma which follows separates the two elements, sea and sky. In the supposed verse, in the second half, the words are hard in sound, and hammered out uniformly in each of their syllables sous-un-ciel-é-toi-lé. In Victor Hugo's line, in the second half, thanks to the e mute of une, and to the fascinating alliteration formed by the two successive ns—une nuit—the voice glides on easily, to rest and dilate upon the second syllable of étoiles, and to die away finally in prolonging the mute syllable which ends the word and the line.

J'étais seul près des flots, par une nuit d'étoiles.

Only compare them!

Going on to the second line: will the poet try to define, by a detail, by something noticed and depicted, the picture formed by the first line? Another would not have failed to do it. But Victor Hugo does just the contrary; he does not add but cancels suggestions already given.

Pas un nuage aux cieux, sur les mers pas de voiles.

For he wants to bring us as quickly as possible from the concrete to the abstract, from external to internal things, in order finally to lead us from internal to supernal things. And remark in passing the elegance of this second line, parallel to the first through its central comma, and by the correspondence of the objects described but parallel by inversion, as one may say, because here the sky is in the first hemistich and the sea in the second: a parallelism of two scales, one ascending, played by the left hand, one descending, played by the right.

Mes yeux plongeaient plus loin que le monde reél

— the real world being already reduced to its simplest expression by the preceding line. What is the essential word here? It is *plus loin*; and you see that the poet has placed it at the point in the line which is necessarily the most accented — the hemistich.

And now the poet is about to invoke all the voices that he hears with the spirit, just because he has passed beyond the world of sense. But he is already quarter way in his poem; how can he voice them all without destroying its just proportions?

Et les bois, et les monts, et toute la nature,

This conjunction et, repeated three times, proves to suffice by the indefiniteness it adds to the enumeration; twice in the first half of the line for the particular voices, once in the second for the entire chorus. I seem to see the leader of an orchestra, calling, by a sign toward the left, upon the strings; by a sign toward the right, upon the brasses; and then with both arms extended in a broader gesture unchaining all the instruments of the orchestra.

Unchaining them? Rather summoning them, not in all their strength but in all their gentleness, and muted. For these are voices that sing in silence, and as it were, add to the majesty of silence.

Et les bois, et les monts, et toute la nature, Semblaient interroger dans un confus murmure.

And here instinctively the poet has used words in which three successive syllables are formed with the letter u: that one which it is impossible to sing loud on a high pitch, that one which cannot be pronounced otherwise than with compressed lips, and by hardly uttering a sound.

Semblaient interroger dans un confus murmure Les flots des mers, les feux du ciel.

Try a moment to lengthen this line out to the measure of the others; by saying, for example:

Les flots profonds des mers, les feux légers du ciel.

Marvellous! It seems as if in adding these epithets, instead of lengthening it, we had shortened it. It is longer in the matter of time, and smaller for the imagination, for thought; for with these parasitic words it no longer awakens any idea of grandeur. As it was, on the contrary, reduced to the four parallel substantives which are the framework of the strophe, see how it girds up the strophe by tying the last line to the first, and how it concludes it by concentrating it.

But we are already half way through the poem; and the theme of it has only been set forth. The poet has only six more lines with which to bring it to its conclusion, when one would think it would take several more strophes. Not at all. Six lines will answer. See, the poet has not let drop the initial movement. He has indeed put a period at the end of the first strophe, but here he is starting off again with the conjunction *et*, thereby linking the second strophe to the first, and even beyond the terminal point of the latter, rejoining the line in which already it is found three times:

Et les bois, et les monts, et toute la nature.

The two strophes are no longer two, but a single musical phrase, destined to broaden and grow in sonority and majesty up to the end.

Et les étoiles d'or, légions infinies. Àvoix haute, à voix basse, avec mille harmonies.

This second line, by a proceeding natural to poetry, passes from one sense to another; the visual impression has become an auditory one. The waves and the stars must respond to the woods and the mountains that have questioned them, and they need a voice. The stars shine more or less brightly according to their distance and size, and they form the groups we call constellations. Well, the more or less intense scintillation of the stars becomes voices more or less sonorous, and the thousand figures of the constellations become a thousand harmonies, perceptible no longer to the eyes but to the ears:

Et les étoiles d'or, légions infinies, À voix haute, à voix basse, avec mille harmonies, Disaient, en inclinant leurs couronnes de feu.

What do they say? Will their answer fill the remaining lines? No, that would leave out the answer of the waves, and rupture the whole equilibrium of the poem. By a boldness unexampled in poetry, and perhaps in language, by an inspiration truly sublime, the poet arrests his phrase then and there, leaves it hanging as it were in the void, and descending from the sky to the sea, seeks in turn the response of the waves, to combine it with that of the stars in a stupendous unison, by means of the repeated word disaient; and to swing them together, like the mingled smoke of two censers, toward Him, whose name by a last artifice he delays to utter until the final line, in order that it may be the last word of this last strophe, as He is in the poet's eyes, the last word of creation and humanity.

Et les flots bleus, que rien ne gouverne ni n'arrête: Disaient, en recourbant l'écume de leur crête, — C'est le Seigneur, le Seigneur Dieu!

The three similes with which this exposition is adorned are the involuntary contribution of a poet, not the deliberate choice of an expositor. M. Dorchain gives more than an exposition, but like a good docent, also leaves other patent details to be discovered by his disciple. (1) The poem describes a question and its answer, the question

wholly contained within the first strophe, the second strophe wholly devoted to the answer. (2) There is a fifth conjunction et which binds the answer of the waves to the answer of the stars, as that which precedes binds both to the question of the woods and mountains. (3) The phrase "confused murmur" seems to lay bare the genesis of the poem in sounds of the wind through trees and over heights that fell on the poet's ear like the voice of the land in a question. (4) In the strophe devoted to the answer, the epithets chosen for the stars and waves are not indifferent adjectives but those which display them in their proper and contrasted colors, gold and blue. (5) As stars but twinkle, while waves crumble, so the poet fancies the one but bending while the others curve downward as if prostrating themselves. (6) The two actions, contained and abandoned, correspond to the heavenly peace and the earthly turbulence of which sky and sea are accepted representatives. (7) The reason for dignity on the one hand and humility on the other is suggested in describing the stars as crowned heads moving in order, and the waves as unruly subjects, whose anarchic fury is emphasized by the position of the word rien at the hemistich of the line. The little poem is a consummate gem, and turn it as we may, new facets dazzle us with their precision and brilliancy.

A first doubt that rises to the mind in considering this exposition lays an axe at the root of the whole theory of the docent office. Is it not to destroy the power of a work of art to make it the subject of open conference? To point out sources of joy acts admittedly to dry them up. The mental law by which pleasure vanishes under reflective analysis has been a tale retold in all ages — in antiquity by the story of Cupid and Psyche, in the middle ages by stories like that of Lohengrin and Elsa. It would appear

then a folly to attempt by any verbal comment on a work of art to lead another on to joy in it. Schiller's lines

Mit dem Guertel, mit dem Schleier Reisst der schoene Wahn entzwei!¹

are then a parable; and the nearest to a work of art is he who apprehends it from afar. Without question the mood in which a disciple is left by any exposition differs materially from the mood which the artist has sought to convey by it. No exposition is more than a skeleton of complete assimilation; and none, moreover, is through traffic with the artist's mind, but a traffic by change of trains with all its possibilities of error. Yet every pertinent exposition contains elements of real assimilation; nuclei of understanding which when we turn to the work again and forget them may lead toward it. The wind of doctrine, while it dampens the fire kindled by the artist, fans sparks therein from which, when it dies away, the whole may again spring into flame. The full truth seems to be that although analysis temporarily deadens appreciation, it tends to drop out of mind, while the understanding which it both quickens and adulterates tends to remain. Within closely guarded limits, only to be observed by a spirit of instinctive reverence, it would appear then that the docent office has a real, if modest, right to exist.

M. Dorchain's exposition is a guide to the docent as well by what it omits as by what it includes. It gives nothing of Victor Hugo's personal history, of his time, or of the special circumstances under which the poem was written. These all belong to the real world; the poem to one "that never was on sea or land." M. Dorchain might have begun thus: "It is a noteworthy fact that the eminence of Victor Hugo (1802–85) as a lyric poet was un-

¹ Das Lied von der Glocke. ("With the girdle, with the veil, the fair illusion falls in twain.")

disputed from the beginning, while his novels and plays were each the object of a violent polemic. His first wide reputation was gained by the publication in 1829 of the volume entitled 'Les Orientales' - in effect a plea for the independence of Greece — from which the poem about to be examined is taken. With regard to the scene there portrayed, it is related of the poet, etc., etc., etc., 'all of which items serve only to domesticate us before the looking-glass through which the poem aims to translate us. An English workman, a passionate admirer of Tennyson, urged to ask an introduction to the poet, exclaimed, pointing upward: "You can't reach Tennyson! He lives there!" Longfellow once aptly compared a poet in his life and in his works with a lighthouse by day and by night. We do not spend time over the lighthouse buildings if our aim is to pick up its beam.

M. Dorchain, again, does not give us generalizations about the poem as a whole, but observations upon its details. The one method comports with an ignorance of the work of art discussed which at once implies and engenders indifference to it; the other demands an acquaintance with it which at once presupposes and communicates enjoyment of it. M. Émile Faguet writes of literary criticism:

General ideas and philosophical considerations lead one around but not into great writers. They can throw a little indirect light on great works, but they chiefly divert and distract from them. A propos of a great writer is not of him; but rather a respectable excuse for saying nothing of him. Criticism by generalities is rather a means of shirking the task than of undertaking it; and rather a means also of setting one's self forth than of interpreting the writer that one is supposed to have read and to want to have others read.

In the field of the objective arts, the histories are a mine of illustrations. Two identical and empty generali-

¹ In Les Annales, no. 1591 (December 21, 1914).

zations are the sole words (in translation) of one work of established authority upon two radically unlike masterpieces of sculpture — the famous equestrian statues of Gattamelata and Colleoni. One is "full of energetic character and bold life": the other is "characteristic to excess but full of life and power." Not to have been struck by their difference is not to have penetrated either. Nor does the phrase "absolute relaxation of sleep," applied in the same volume to Michel Angelo's figure of Night, penetrate the meaning of an attitude in which one hand has already slipped from beneath the forehead and the elbow is in the act of gliding down the thigh. The figure has been compared to the restless Ariadne of the Vatican, and is even more unrelaxed. Plainly, in this standard book, the broad stroke was used because either congenital incapacity or limitations of a mistaken task hindered the use of the fine. Generalities may be good servants in the docent office but they are bad masters.

M. Dorchain's example again teaches that the docent must very rarely praise directly. To affirm that something is beautiful is to announce that the speaker takes pleasure in its contemplation. The docent either cannot or can point out sources of that pleasure. If he cannot, the announcement will not tend to awaken it, but rather will emphasize its lack in the disciple, either pique him, and dispose him away from enjoyment or invite him to sham thereafter a pleasure which he does not feel. If the docent can indicate its origin, this is his business, and the preliminary statement of his own good fortune is for the most part a gratuitous futility. To awaken a sense of beauty it is essential to proceed by setting causes in action, not by commanding their effect. If the docent's enthusiasm is real—and if not he is no docent—it will pierce through the soberest language he may choose. The familiar his-

tory of art already quoted again offers examples of what to avoid. The following forty-six words constitute one quarter of the whole number devoted in this volume (in translation) to the Sistine Madonna: "wonderful form glorious raiment — heavenly apparition — lovely angelfaces - majesty of his eyes - saintly Pope - lovely demeanor — graceful head — revelation of power and glory — enchanting angel-boys — last touch of beauty to this magnificent work — deepest thought — profoundest insight — completest loveliness — the apex of all religious art." In all M. Dorchain's exposition on the contrary there are but four phrases which can be called open praise. He speaks once of the "fascinating" alliteration in une nuit; again of the "elegance" of the second line; again of the whole poem as "destined to grow in sonority and majesty up to the end"; and finally of the suspension produced by the repetition of the word disaient as an inspiration "truly sublime." All else in the long analysis is a plain description of the make of the two stanzas, yet conceived with an admiration so ardent that its contagion is irresistible.

The docent must be even more circumspect in the use of dispraise either direct or indirect; and M. Dorchain is again an example to follow. He tells us neither that the poem is (or is not) of Victor Hugo's best, nor (unless by a single playful hint) that Victor Hugo is the greatest of French lyrists. Such statements are rife in all descriptive books on art, full of references to its blossoming and decadence. Yet they convey barren statistical information, empty of all illuminating force. They put before the mind a simple quantitative picture made up of heights and depths. The sole pointer they offer a disciple may be thus expressed: "A given amount of attention will be best repaid by this work or this artist." To which three re-

joinders are in place: first — Such is your opinion, but who will guarantee its justice? Yesterday proclaimed Murillo the greatest Spanish painter; to-day proclaims Velasquez. Second, admitting the infallibility of the claim you represent, what are the merits that make up this matchless sum? Double stars do not constitute a guide book. The feast of which we also wish to partake, you point us to, but do not set before us. It has been acutely remarked that critics sometimes "use works of art only as a stimulus to their memories of related objects." Their minds are so full of relations that they are incapable of apprehending the things between which the relations subsist. Third, supposing your opinion infallible, and the feast partaken. are there no other viands of the spirit spread on other tables? Toward these your words of indirect dispraise do not invite us; they rather disillusion us about them. When you call one stage of art still imperfect, or another past its prime, we are vexed with the question — "What more?" — when you call another the highest, with the equally disappointing query—"Is this all?" M. Dorchain permits himself two comparative judgments, neither referring to other poetry generally, but to specific lines of his own composition. In the transposed first line and the lengthened sixth line he gives us the materials for a judgment, and asks us to render it for ourselves. This method escapes all three of the faults of the customary statistical procedure. It does not claim infallibility; it minutely describes the particular merits it claims; and the lines dispraised are not the work of another poet, but inventions for the occasion as corpora vilia of comparison.

Another pitfall of artistic exposition is wholly avoided by M. Dorchain. The docent must not fancy it any duty of his to teach the laws of beauty. In so doing he would commit a psychological solecism of the first order. A dis-

ciple may easily think that if he only knew the general principles according to which certain things give pleasure he would be armed to perceive their beauty; and a docent may be inclined to ask of what else can a course of preparation for the enjoyment of a work of art consist than a discourse upon the laws of beauty as exemplified therein. Yet nothing could be more useless and in fact prejudicial to the docent aim. It is useless because there is no causal connection whatever between abstractions and the phenomena they collate. To inculcate a mental law does nothing to bring about its fulfilment. What fulfils it is the presence in the mind of the causes whose effect the law formulates. Does it help us see jokes to learn that the phenomenon of the ludicrous is due to a datum unexpected under a certain interpretation of circumstances which prove to have another interpretation in which the datum becomes expected? Yet this is the content of theories of the Comic. In the instance of beautiful things, it is the apprehension of those aspects of them that give pleasure which furnishes the why of the beauty of the work to us. The generalization itself according to which they do so has no such power, and our ignorance of it will be no handicap to our enjoyment. A knowledge of it, on the contrary, will be such a handicap. It calls the mind away from the concrete object, the bearer of the artist's thought, to a region of abstract and colorless idea in which he has had no part, and in which if we wish to follow him we will take no part. In M. Dorchain's exposition, as was to be expected, the enunciation of laws of beauty is conspicuous by its absence.

The chief positive factor in effective exposition is the labor of directing the disciple's attention upon vital elements in a work of art, of insuring that it is really perceived in detail, and taken in in its entirety. Equally

important in a negative way, and in practice naturally mingled with it, is the labor of clearing away difficulties of comprehension.

Victor Hugo's lines are so plain that M. Dorchain has almost no difficulties to elucidate. Without him we might possibly have mistaken or ignored the reference to brighter and fainter stars in the "à voix haute, à voix basse," but all else is clear and we are left to ourselves to understand it. In most other poems there would be far more to explain, and in many there would be insoluble enigmas. It is hardly too much to say that the first contact of any one with any museum object — any picture, any statue, any fragment of architecture, any product of minor art has its share of the disagreeable state of mind we call bewilderment. To be bewildered over a thing is to make unsuccessful attempts to understand it, and here as everywhere ill-success is not a pleasure but a pain, lighter or severer as the case may be. Bewilderment continued becomes more and more a load on the spirits. Failure to understand one feature after another in the work we are inspecting first produces boredom and then exasperation with it — both of them moods which are to the creative joy of the artist as oil is to water. It is the business of the docent to prevent this untoward outcome at all hazards: but as evil is always best overcome with good, the negative effort will not be a labor by itself, but a by-product of the labor of stating the right interpretations at once and before they can be missed by the disciple. The main task of the docent is therefore an interpretation which shall at the same time be an explanation.

His general method will consist, as M. Dorchain's does, in going over the work of art in detail and in review, and making sure that it is thoroughly apprehended as the artist would have it, both by eye and mind. This ideal is

rarely even approached. Why are not Michel Angelo's expressions of the fop in his statue of Adonis and the sot in his statue of Bacchus matters of common remark? Because students of him do not look at his works. The docent is one to whom "the visible world exists," as it did to Théophile Gautier; and who seeks to make it exist to others. By a convenient distinction the purpose of an artist may be divided into a sensuous and an imaginative intention. He may mainly, or wholly, aim to give the beholder certain sensations in a certain arrangement, to which may be added almost invariably the emotional mood which these sensations awaken. Or he may mainly, though never wholly, care to impart the inferences which are naturally drawn from the forms and colors which make up his work as an object of sense. The first alternative is that of direct, or free beauty, of which the cardinal exemplar is music; the second, indirect or representative beauty, of which the cardinal exemplar is literature. The direct element is essential also to belles lettres, especially to poetry, as the preamble to M. Dorchain's exposition indicates. In the objective arts — alone represented in a museum — the elements of sense and imagination are more nearly equalized, one or the other predominating as the artist's temper dictates. Whistler's "Nocturnes" and "Arrangements" illustrate in painting the gravitation toward musical structure which Walter Pater finds in all the fine arts. Interpretation by a docent will therefore not aim exclusively, or even in many cases mainly at mak-

¹ Yet his art inevitably went further. "It is true again that Mr. Whistler's own merest 'Arrangements' in color are lovely and effective: but his portraits, to speak of them alone, are liable to the damning and intolerable imputation of possessing, not merely other qualities than these, but qualities which actually appeal — I blush to remember and I shudder to record it — which actually appeal to the intelligence and the emotions, to the mind and heart of the spectator." A. C. Swinburne, "Mr. Whistler's Lecture on Art," Fortnightly Review, June, 1888.

ing plain to a disciple the so-called "story" of the picture or the statue. But he will include both elements if he take care to see that every vital line and surface and shadow and tint is at least perceived by the disciple; and shall be understood as well, if he divine an intention in the artist going beyond the sense impression to its imaginative fruit. He must say not only "the shadows gather here" or "every tone in the picture is reddened" but "an endless plain stretches beyond, with occasional glimpses of the sea"; or "the saint is Catherine and the wheel a symbol of her martyrdom." By this guidance the burden of bewilderment will be lifted, and the work of art seen with that degree of minuteness, breadth, and deliberation through which alone it can yield its impression, and which, nevertheless, is habitually denied it even by those who aspire to speak and write. Thus only are works of art both recommended and taught. The disciple grows into the other half of the incomplete being we call an artist; and by his beholding gives the work a new lease of life in another spirit.

The experience of docent work in a museum suggests three practical rules. The essential office of the docent is to get the object thoroughly perceived by the disciple. Hence, draw attention to the object first; talk about it afterwards, and only if occasion offers. In the words of François Coppée, 1 "Voir d'abord; ensuite, savoir"; else your auditor's attention will be divided between trying to decipher the object and trying to follow you. Again, the admiration of the docent is like the latent fire of a match, imprisoned in his head, and not effective without an interlocutor as igniting surface, and even an auditor beside as tinder. When these are seen to in advance, there will nearly always be an extended blaze. Hence, let the

¹ Souvenirs d'un Parisien.

docent of a group provide himself at the start with a questioner (to be kept within bounds) and a hearer. Again, a formal talk upon a work of art may to advantage be repeated, but only up to the point at which further repetition does not improve it. This point will be reached after not very many repetitions. Stendhal has somewhere written that seventeen was about the number of times that one could see a picture before it began to lose its effect. Perhaps we may be said to know a work of tangible art well when on closing the eyes we can reproduce it in some detail in imagination.

The official recognition by museums of the duty of oral instruction upon their contents dates from very recent years. The initiative was taken by a museum of art. In Boston, in 1895, the interpretation of museum exhibits by museum officers was under consideration at the Museum of Fine Arts. Expert guidance in the galleries had already been privately advocated. In the following year, 1896, the Trustees consented that volunteer representatives of the Twentieth Century Club of that city should meet visitors in the galleries of casts to give information about the reproductions of sculpture shown. The experiment was carried on for three months under the supervision of an officer of the Museum, who reported to the Trustees recommending that if continued the service be made official. For ten years this was impossible. The studies and plans for the new building of the Museum fully absorbed the energies of the administration. In June, 1906, the Museum Bulletin at last announced the project, and applied

¹ Mr. J. Randolph Coolidge, Jr., a Trustee of the Museum since 1899, and during 1906 its Director, proposed the plan to a friend in a letter written in 1892. Since the official adoption of the method by the Boston Museum, Mr. Coolidge has contributed materially to its success by his personal coöperation as docent.

the forgotten English adjective "docent" to the future duty. Meanwhile a similar effort had been undertaken by volunteers at the Louvre in Paris. In remarking upon it in December, 1901, the "Chronique des Arts" suggested that officers of the museum should conduct the instruction. "Thus the public would learn to see better, and to comprehend better, from those to whom long familiarity and laborious achievement have given the privilege of becoming the intimate friends of our masterpieces." Two years later, in September, 1903, the Mannheim Conference of Museum Officials received a number of reports upon like volunteer movements in German museums. Finally, in April, 1907, gallery instruction was made an official function at the Boston Museum. The Bulletin of that date announced that an assistant in the administration had been appointed, under the title of "docent," to the additional duty of giving visitors in the galleries information about the exhibits. Similar appointments with the name of "museum instructor" followed within a year or two at two museums in New York, one a museum of science — the American Museum of Natural History — the other a museum of art — the Metropolitan. The opportunity of service was welcomed by other museums throughout the country, and the new word "docent" has since become widely accepted among us in the new sense of an official commentator on things shown. A docent is one who explains exhibits. From the beginning this term has signified not an official post but an official duty; not a functionary but a function. All of the officers of the Boston Museum, most of their assistants, and many friends have taken part in the service in the ten years since it was begun. In England, in pursuance of a suggestion offered in 1910 by Lord Sudeley, an official "guide demonstrator" was in 1911 appointed at the British Museum,

and the system was later under consideration at the National Gallery and other museums of art in London. Professor Réau, in France, writes that it is their "constant attention to popular education that forms the chief originality of American art museums," the official recognition of the duty "being almost unknown in the museums of France and Germany." It would be vain to hope, he writes again, that the words of a docent, "however eloquent, could transmit a sense of beauty to those who have not been endowed with it. But he will be able, in analyzing a work of art, to train the eyes of the people, and teach them to see better."

In American museums of art, gallery instruction is one factor in a widespread recent movement for their utilization for educational purposes. Luther is credited with comparing public opinion to a drunken peasant on horseback. Righted on one side it falls toward the other. The rude comparison has an aptness illustrated once more in the history of museum economy. Museums of fine art began by subordinating their rôle of showing to their rôle of keeping, their monstrant to their gardant office. This was the magazine era of museums, when they were built and arranged with chief reference to the preservation of their contents. These were the days of closely restricted access, of crowded rooms and walls, of great cases with multifarious contents, both arranged in each other's way, of light openings insufficient and dazzling. In large measure awakened since to the absurdity of this shortsightedness, museums have inclined toward the other possibility of error: that of subordinating their rôle of showing to their rôle of teaching, their monstrant to their docent office. To

^{1 &}quot;L'Organization des Musées. Les Musées Américains," Revue de Synthése Historique. (1909.)

^{2 &}quot;Musées Américains," Le Chronique des Arts (December 24, 1910), no. 39, p. 308.

the magazine era has succeeded - notably in this country — a school era, when museums of art are managed with conspicuous reference, if not chief reference, to instruction by means of their contents. This is the day of the employment of public collections as apparatus in school and college courses, of omnipresent and obtrusive labels, of the obstruction of galleries by copyists and by classes under preceptors, of lecture-rooms and classrooms, and of detailed programmes for their use timed to the educational year. The museum of fine art is greeted, in words likewise applicable and likewise inappropriate to the church, as "the crown of our educational system." An end will come in time to this opposite and equally absurd shortsightedness. The primary aim of exhibitions of art is to bring it about that certain artistic intentions shall be apprehended by the spectator of the objects fashioned to embody them. The conservation of the objects and the instruction of the spectator are subsidiary to this purpose; their simple display to him in part accomplishes it. A museum preserves its contents in order that they may be taken in by eye and mind; and instructs upon them in order that when shown to the eye they may be grasped by the mind. Should it install its contents even to their hurt and without commentary, it would still in a measure attain its purpose; while if it kept them never so safely and interpreted them never so wisely without ever letting them be seen, it would wholly fail in its aim. The museum gardant and the museum docent are means: the museum monstrant an end.

The beginnings of a natural treatment of public exhibitions of fine art may be descried in the subordination by museums of the aims of safe and compact stowage and of didactic effectiveness to the aim of display. When they install fewer objects at once, in more congenial surround-

ings, with a greater regard for the limitations of the human sight and muscles; when they give a less conspicuous place to labels and other machinery of teaching and recognize that the proper educational office of a museum of art is instruction toward and not from exhibits, and the paramount interests in their keeping those of the adult public, the three functions, gardant, monstrant, and docent, will at length take on their definitive status.

DOCENT SERVICE AT THE BOSTON ART MUSEUM ¹

The day has long gone by when a librarian could exclaim with glee, as a librarian of the old school is said to have done: "All the books are in to-night except two, and I am going over to get those." Likewise, the day is passing when the accumulations of museums will be accepted as a measure of their success. They will be asked what they are doing to make their accumulations tell on the community.

Years ago, the late President Gilman of the Johns Hopkins University made in conversation the suggestion that public libraries should invite representative men in various walks of life to be present at stated times in the library to help all comers to a knowledge of books in their various specialties. Art museums offer a similar opportunity. The pulpit has long ceased, even in our New England communities, to be the all-sufficient source of light and leading. Meanwhile, all classes of the community, churchgoers and non-church-goers alike, have won leisure to devote to literature and art. Why should they not gather in libraries and museums to hear works of literature and art commented upon by those who know and love these things? In the spring of 1907, this suggestion of a quarter century before was put into practice in Boston. The Museum Bulletin announced that one of the assistants at the Museum had been assigned, with the title of "docent," to the duty of meeting visitors in the galleries and giving information about the exhibits. The service has

¹ Reprinted from The Nation (New York), September 1, 1910.

grown from this beginning until it now occupies several of the staff during parts of every week day, and, with the aid of speakers from outside the Museum, has been extended to Sunday also.

The one great interest present to all hearers alike, the one difficult thing to comprehend, is the faraway source of the objects before them. This deep and singular impression on almost every attentive beholder is due to nothing that a docent can say, but to the work itself, which thereby prepares to make itself understood. A sense of beauty is as impossible to convey by word of mouth as a change of heart. Indeed, as Professor Réau has just written: "Must we not be en état de grace (subjects of grace as the English theologians would say) in order to understand a work of art?" In the words of Jacob Burckhardt, a docent does not seek to "point out the fundamental idea or conception of a work of art. Were it possible to give this completely in words at all, art would be superfluous and the work might have remained unbuilt, unchiselled, and unpainted." The aim of a docent is "to sketch outlines which the beholder's own perceptions can quicken into life."

Of course, there are many visitors who turn away list-lessly. And of those who stay and who return, by no means all may be really the gainers. Many may be attracted by the novelty or by an idle pleasure in something going on. One sometimes comes back from a tour of the galleries with the doubt whether, after all, it is possible to make a museum of fine art in any vital sense a popular institution. Does not the after-world for past civilizations consist only of fewer and fewer learned men? Are museums, then, doing the general public any real service when they collect objects out of date with the intention of allowing them to become more so?

Against so formidable a doubt, the only safety is an appeal to facts. We must seek actual observation as to the capacity of men in general to get good out of the remains of bygone art. We know that the museum is a favorite weekly resort for all classes. What more can it do to help all its visitors to that share in the life of the imagination which is every one's birthright? That it can do much more seems not unlikely.

But at once other doubts arise. We are told that talk about the subjects of pictures and statues, and upon the men and times that produced them, does not elevate, but flatters, the public taste. Let it be replied frankly that this opinion is due to defective æsthetics and an altogether mistaken psychology. Defective æsthetics, because the subject of a work of art unquestionably is a part of its artistic content; else a painting of an ash-heap might rival a portrait in artistic rank. The fifteenth-century Italians who knew something of fine art in practice, however unmindful of its theory, had no other word than stories (istorie) for the sculptured reliefs that have since been the admiration of the world. Mistaken psychologically, because to disapprove of using the historical interest of works of art as a help to their appreciation is to ignore the preëminent value of indirect mental access. Every nursery teaches that there is many a true and needed word that can be spoken only in jest. In diplomacy what has not the salon wrought, and in business the smoking-room and the yachting party? Every astronomer knows that fainter objects of the sky can be seen only if the eye is directed a little aside. So it is with the more delicate factors with which the artist works. While a historical memory is building itself up in the mind of the hearer, is not his eye opened to the forms and proportions, the balance, and the harmony before him? And will not his

attention take in these elements quite as well if thus held near as it would if turned directly upon them?

Docent service has been organized at the Boston Museum to meet the common experience of travellers. Any one who has ever looked at a picture or a statue in the company of an appreciative friend knows how much the comprehension of it can be aided by the communication of another's interest and information. Tennyson's lines express the idea:

And what delights can equal those
That stir the spirit's inner depths
When one that loves, but knows not, reaps
A truth from one who loves and knows.

But, on the other hand, every one who has visited places of interest like Warwick Castle, where the "h'inlaid h'arms is very beautiful," or the tombs of the Scaligers described by Anstey's amusing Italian as "very grazioso, molto magnifique, joli conservé," knows also what unutterable weariness results from the companionship of most professional guides. The Italian word "cicerone" as full of words as Cicero himself — expresses the tedium of generations of travellers. Granting that it is fatal to make an exclusive business of talking about art, nevertheless it remains true that those who have already made friends with works of art may profitably be asked to devote a fraction of their time in introducing others to the same friendship. This is what has been done at the Boston Museum. A docent is a companion among works of art, but he is also not a companion by profession. Docent service is a new function of museum officials and other interested persons, not a new office in museums. That those invited to this duty should be otherwise employed during much the greater part of their time is its cardinal feature. A museum of art is full of voices worthy to be listened to, but as the deaf are often helped by other

sounds, so we who wander through museum galleries often hear the silent utterances around us only when a living voice makes them audible. In every museum of fine art the pulpit and the texts are ready, and the hearers await the speaker.

THE PROBLEM OF THE LABEL 1

The problem of the label is a particular case of the general museum problem of conveniently associating information with objects shown.

To merit a place in a museum an object must have interest either for its own sake or for what it teaches. According as a museum treats its contents primarily as treasures or primarily as teaching material, it belongs to one or the other of two classes, which may be called respectively the perceptive and the reflective. Museums of art exemplify the perceptive type; museums of science the reflective type. Both need to associate information with objects shown; but the museum of art does so primarily in order to foster a love of the particular concrete things it contains, the museum of science primarily in order to promote a knowledge of abstractions they illustrate. The contents of the one are sights, of the other signs. The problem of the label differs in importance accordingly in the two kinds of museum. In the museum of art the label is a means to the end of enjoying the treasure it accompanies; in the museum of science it represents the end of instruction for which the accompanying teaching material has been gathered. In the museum of art the problem of the label touches indirectly, in the museum of science immediately upon the ultimate purpose of the institution.

In the following discussion the problem will be considered only in so far as it relates to museums of art. Such is the museum in which we stand, whose governing body

¹ Reprinted from the *Proceedings of the American Association of Museums*, vol. v. (1911.)

has declared that "it is to be what its name indicates — a museum of the fine arts; that its primary purpose is to gather and show the best obtainable works of genius and skill; that the application of its contents to industry and their illustration by archæology are both within its scope, but that neither of them is its first object." This statement defines the perceptive museum. Accordingly, the association of object and information which we shall here consider is one in which the information is offered primarily for the sake of the object. We shall touch only upon what may be called the art side of the label problem, remembering that for museums of science the problem is a different and more fundamental one.

Information may be of two kinds — spoken and written.

Spoken information demands a speaker, and is therefore difficult to arrange for. Nevertheless, let a play on words help us remember that the best possible label is labial; heard not read. President Garfield's idea of a university — a log with Mark Hopkins at the other end — has its application to the search after information generally. But the Mark Hopkinses are oftenest not to be found and the log is oftenest not at hand.

Written information remains. On or near a work of art and confined to the four chief questions about it — what, who, when, and where — it is called a "label."

The immediate value to a visitor of answers to these four questions is twofold; first, a negative value, that of relief from bewilderment over the work — in other words, the satisfaction of his chief curiosities about it; second, a positive value, that of the deepening of his impression from the work by all that he already knows about its subject, artist, time, and provenience. Incidentally, moreover, the four w's provide him with a name to know the

work by; and ultimately, also, the memory of the work is vivified by what the visitor may hereafter learn about these matters; and *vice versa*.

The advantage of displaying the answers on a printed form affixed to the object is that the visitor receives them in pursuance of his sight-seeing. This advantage is often thought indispensable. It is assumed that most sight-seers would rather know nothing about what they are looking at than take any further trouble to find out about it. Such an opinion is nevertheless a patent blunder disproved in the experience of every traveller. What information about sights abroad has any one ever gained from reading superscriptions upon them compared to what he has labored to carry away by reading guidebooks about them? Instead of being unwilling to turn away from a sight to learn about it, travellers are only too willing to do so. The inattention of the modern man to the visible world is a portentous cloud on the future of the objective arts generally. The supposed popular alternative — label or nothing — is a pseudo-dilemma. If fuller information is accessible, even at greater trouble, sight-seers who accept any will often prefer it. The label is not a necessary factor in exhibition. but an occasional convenience only.

The limited sphere of the label in the machinery of show becomes evident in considering its disadvantages.

These are at least sevenfold. First, the label is often unavailable. In a collection of small objects the description, maker, date, and source of some may have to go unspecified therewith for lack of convenient space. The complete labelling of any miscellaneous collection of exhibits may be said to be in general a physical impracticability.

Second, it is unsightly. Unlike an inscription, which is composed with the object, a superscription is in general

an unharmonious addition thereto, and unless staring is apt to be illegible. All are agreed as to this.

Third, it is impertinent. It reflects on the object by proclaiming it unknown and on the beholder by proclaiming him ignorant.

Some one has suggested that it would facilitate matters at public gatherings if all the dignitaries present should wear breastplates with their names and other personal particulars distinctly engraved thereon. All comers would then know at once whom they were looking at and would gain immensely more from the occasion. The suggestion has never been taken up, doubtless for two reasons. Every one would feel that distinguished individualities would lose in personal dignity by becoming pegs on which to hang information about themselves, while those who came to greet them as familiar and honored friends would resent the offer of a table of facts about them as an intrusive annoyance.

The case is similar with works of fine art. These, too. are distinguished individualities - impersonal and immortal, it is true. A ticket or label does not honor, but rather humiliates, them, and when they become familiar to us is a hindrance to friendly relations. The fact becomes evident on considering limiting cases. The words "St. Paul's Cathedral" carved on an architrave of that church or displayed in electric letters about its dome; the words "The Capitol" similarly placed on the structure in Washington would be generally thought to derogate from the unique dignity of those buildings; and most sight-seers would doubtless resent the implication that they needed the information. Likewise, the labelling of museum treasures will be felt as a double impertinence in proportion as that acquaintance with its contents grows which every museum is founded to conserve and foster.

Fourth, it is fatiguing. Reading labels, far from being no trouble, is generally a severe exertion. It adds so greatly to the labor of a museum visit that those visitors who conscientiously attend to a few labels are apt thereafter to be capable of little more than passing glances at anything.

Fifth, it is unsatisfactory. The description, author, place, and time given in a label are for the most part little more than names to the visitor, often soon to be forgotten.

Sixth, it is atrophying to the perceptions. The easy satisfaction of the four uppermost questions about a museum object dulls interest in it, and confirms the habitude of treating things made to be looked at as if they were made to be read about. This is greatly to the beholder's loss; for, as a jewel to its case, so is observing a work of art to reading about it.

Seventh, it is misleading. We often cannot tell the close truth on a label without making it impracticably cumbersome. A proportion are forced to perpetuate misinformation. Again, a label emphasizes that part of the content of the object which is describable in words — its motive or use — to the exclusion of the rest of its content - always more important. The difficulty of directing the attention of a spectator to the fundamental idea of a work of art is known to all artists. Was it not Whistler who covered with paint some absorbing detail in a picture in order that his general purpose in its color and significance should not escape the eve? Of the novel of "Madame Bovary," Flaubert is reported to have said: "People always harp on the 'coté vaudeville' of the story, while all that I sought to create was 'quelque chose de gris'"meaning that any other plot and setting of the same melancholy tone would have served his purpose as well. The fault lav with the label of the tale, which indicated the fortunes of a woman as its principal interest. At the name "St. George" under the well-known statue, the fancy loses itself in the Asian legend, forgetting the young soldier of the Florentine streets that Donatello transported from life to immortality. In a word, a label, while it may be a charming ornament to a work of art — witness the title, "It Never Can Happen Again" — and a convenience to remember it by, always fails to express and generally tends to obscure its content.

These disadvantages suggest seeking substitutes for labels. A docent is the best, as has been said, but in general written information must suffice. The problem of the label, then, becomes that of connecting a given object with given written information otherwise than by affixing the writing to the object.

What are the possibilities of the case?

By "connecting the written information with the object" is meant making it possible and easy for the spectator of the object to find the writing referring to it. When the writing is a label, that is, when it is immediately juxtaposed with the object, the spectator cannot go astray; but when it is not on or near the object, he must in some way be directed to it.

- 1. A general description and location of the object will suffice and is often used in guidebooks. The words "In the Lady Chapel, the Altarpiece," will enable the sight-seer to apply the added information, "by Rubens, represents the martyrdom of St. Stephen," infallibly to the right object. But such a verbal link is always cumbrous, and becomes impracticably so in a museum.
- 2. A pictorial link is much more effective. The visitor may be provided with a page or pages of illustrations of what he is to see; and these pages may bear the appropriate information. But how connect the separate items each with its respective illustration? Either (a) by

printing each thereon or thereunder, labelling, as it were, the illustration instead of the object; or (b) by printing the items together and the illustrations together and referring each member of one group to the proper member of the other group by a common and distinctive sign like a number, as in the printed keys that often accompany historical pictures.

The first alternative, that of information on or under an illustration, is open to none of the objections to which a similar item on or under an object is exposed. Being unrestricted in matter, it is not properly termed a label. This method has only its cumbrousness against it; and in spite of this has a wide application.

The second alternative, that of grouping the illustrations together and the items together and referring by numbers from one to the other group, has the advantage of compactness but pays for it by an increase in complexity. The chain of direction from the object to the information now possesses two links. In the earlier case the spectator was led from the object to the illustration by visual recognition and from the illustration to the information by their juxtaposition, the illustration being the single link. By the method of grouping he is led from the object to the illustration by visual recognition; from the illustration to a number by their juxtaposition in a group of plates, and from the number to the information by their juxtaposition in a group of texts. The illustration and the number are two links in the chain of direction.

Both these methods are applied in the hosts of books called treasuries or monuments of art which the late advances in processes of pictorial reproduction have brought forth. The illustrations may be faced by a related text or may be gathered together as numbered plates and referred to from the successive sections of a text, varying from a simple index to an elaborate series of disquisitions. But such treasuries are apt to be large volumes designed for the library and impossible to use as guides to the original objects they discuss. The method of attaching items of information to a series of illustrations has, nevertheless, been applied with success in the "Handbook" of this museum.

An evident simplification reduces the double chain of direction to one link again. Why use illustrations at all? Why not number the objects themselves? Evidently in many cases, perhaps in all, this will be practicable. The process of finding the information appropriate to each then becomes a passage from object to number by juxtaposition in the gallery and from number to item by juxtaposition on the page. The label reappears in the form of a number. In this form the seven objections hardly apply. A number is (1) generally available as a means of identification; (2) is not conspicuously unsightly; and while (3) it still retains a flavor of impertinence; (4) it is not fatiguing to read, being simple in form; nor (5) unsatisfying, being merely a reference; nor (6) dulling to the perceptions, for it does not distract from the object; nor (7) misleading, for it reveals nothing.

This last solution of the problem of the label may be called a "gallery book." It consists essentially in grouping the information about exhibits into a numbered series of items, the exhibits being numbered to correspond. It is as if the labels of an exposition were gathered off the walls and out of the cases, replaced by numbers and put into book form under corresponding numbers. From another point of view the gallery book may be regarded as a democratization of the customary catalogue. Numbered lists corresponding to numbered objects are no longer offered for purchase to those who can pay, but for use to

any who need them; with certain changes in method and form corresponding to this change in destination.

To the obvious objection that labels gathered from their secure position on the walls or in cases and put into the hands of the public will soon become defaced, if not illegible, the only rejoinder is a provision for their multiplication and renewal. This is the first requisite of the democratization of the catalogue. Lending catalogues, for such they will be, must be prepared in quantity and replaced when necessary.

The second requisite changes the form of the catalogue by dividing it into independent sections, each applying to one room only or even, it may be, to one case. Gathered into a single volume, a collection of items of information serves the purposes of one person only; separated into many sections, it may be used simultaneously by as many visitors. This is essential; for the second real objection to gallery books as substitutes for labels is that the information relating to the exhibits becomes thereby accessible to far fewer people. True; but it is practicable so to multiply the books in each gallery as to give one to each of as many visitors as ever would read the labels in a gallery simultaneously. In a great crowd but few either can or will do so.

Apart from these two demands the gallery book may be treated and made like a catalogue. It is exempt from the limitations of space which make the label unsatisfactory and misleading, and with the four w's can combine any other information deemed appropriate.

Nevertheless, be it said in passing, the text of a gallery book will greatly differ, through its democratic and artistic purpose, from the text of most exhibition catalogues. These are customarily both aristocratic and non-artistic, addressed to the few concerned to know about art and not to the many demanding to know art itself. The scientific and personal gossip which is the staple of catalogues must give place in the gallery book, if this is to accomplish its task, to information more germane to the content of the objects listed.

Every museum official will be sensible of four benefits incidental to the substitution of gallery books for labels:

First, numbers are necessary on many objects in any event, if a museum is to have catalogues. The democratization of these in the form of gallery books obviates the need of lettering exhibits also in order to inform about them.

Second, as personal acknowledgments, placards naming the givers or lenders of objects will still need to be attached to them. In proportion as such placards usurp the place of labels, the acknowledgments they offer will gain in distinction. Visitors will moreover learn not to be distracted by them.

Third, there will be no forgotten labels misplaced, darkening by time or perpetuating uncorrected data. In a gallery book the information offered visitors about exhibits would be continually under the eye of employees. Its physical condition would be the responsibility of the custodian of the gallery, and its content would be brought immediately to the notice of the curator at least as often as the labor of copying changes suggested to the clerk to ask the question whether it was not time for a new list.

Fourth, the gallery books of the museum at any given moment would constitute a complete catalogue of its exhibits at that moment. The labor of providing this catalogue would be accomplished in the course of installing objects, and the list would be kept up to date in the daily course of changes of exhibition. At any time the preparation of copy for a complete printed catalogue of the col-

lections of the museum would cost only the labor of supplementing a current set of the gallery books by a list of objects at that moment withdrawn from exhibition.

The reasons given and the experience cited strongly recommend gallery books. It may already be claimed that they are an essential auxiliary to any system of labelling. To what extent they may eventually be made the substitute for labels only experience can determine. The democratization of the catalogue is too new a device to permit of a judgment upon its ultimate sphere.

But whatever the future of labels in museums of art, it may be said with confidence that they will linger in a form radically different from that at present common. True labels — items of information addressed to a visitor to the objects they concern — may be said hardly yet to exist. The placards that pass at present for labels are often not addressed to a visitor - one who sees - at all; but to a student — one who imagines on the basis of a description. This fact is made evident by two chief faults of existing labels. These are apt to be made up, in greater or less measure, of matter which to a visitor is either self-evident or incomprehensible. The reason why a small marble figure feminine in form and dress is labelled "Statuette of a Woman" - although the diminutive size and female type are apparent to every one who can read the words — is that this item of information was conceived as an entry in a list, the reader of which might not have the object before him and would need a general description.

Likewise, the reason why phrases such as "Sistrum bearer" and "Prix de Rome" appear in labels is that the writers had in mind readers of books — persons to whom the interpretation of such phrases would conveniently offer itself. As they now mostly exist, labels (so-called) are clippings from catalogues; at once redundant in the

presence of objects and barren in the absence of contexts. To make of them an independent avenue of information about an object before the eyes they must be revised in accordance with the rule: Put nothing in a label either evident without it or incomprehensible without further information; for it will fail to enlighten the public alike in offering what all able to read can see for themselves; and in offering what it demands special knowledge to understand.

Judged by this rule a sorry minimum of vis educatrix would be revealed in many of the placards ostensibly illuminating the public regarding the exhibits of our museums of art. The label as it is far more inferior to the gallery book in its instructive efficiency than the label as it might be. The needs of him who envisages the object are the forgotten criterion. True labels are therefore a function, as the mathematicians say, of the special public which each museum serves. Its level of intelligence and education determines what should be assumed evident to the visitor, or envisager, without words; and what incomprehensible without more words than placards should contain. Each museum of art must in future recognize as its own independent problem the content of whatever labels it chooses to retain.

These conclusions suggest the following solution of the problem of associating printed information with objects shown in museums of art:

(1) Information posted in view of every visitor should be restricted to signs containing for the most part very general descriptions of what he has before him. There are two reasons. If a general visitor, he will want no more information. If a specially interested person, he will be willing to take trouble to get more.

- (2) Signs should be used in the following ways:
 - (a) On the walls of rooms, and on cases or other settings for groups of objects, giving a general description of what they contain.
 - (b) On pedestals or frames of important isolated objects.
 - (c) On objects in a setting which do not come under the general sign provided for the setting.
 - (d) On objects or groups of objects to indicate the giver. In general, such cards of acknowledgment would be the only signs within a case and would gain in prominence from that fact. They might be engraved forms like a personal card.
- (3) Signs giving the same kind of information should be everywhere similarly placed; so that the visitor should always know where to find it; and in particular

the names of rooms and collections above the cornice bounding the exhibition zone;

the numbers, or titles, of objects below the objects; the sources of objects, including the names of givers or lenders, above the objects (as on the upper frame of pictures or cases) or on cards among them.

- (4) Signs might be in pale brown lettering upon still paler brown background. For convenience in the rearrangement of rooms, they may be painted on wooden strips and hung in place.
- (5) Detailed information about every exhibit should be accessible in every gallery in a book containing corresponding entries. These entries should, if necessary, be numbered to correspond to numbers

- beneath the objects. Lending copies of this book should be provided and may be placed in pockets at the doorways of the gallery.
- (6) Numbers should be used in connection with objects only in case they cannot easily be identified otherwise. In this event, to every exhibit, or group of exhibits, demanding separate description in order to afford the visitor the most intelligent enjoyment. there should be a number affixed, corresponding to an entry in the book of the gallery. These numbers should be printed in pale brown lettering on still paler brown background, the effect of both to be as unobtrusive as will leave the numbers legible within the distance at which they would commonly be read. The numbering should be about one quarter inch in height for objects in cases and half an inch or more for wall objects. The numbers should be placed below or in front of the centre of the object or as near this position as possible. All the numbers in one room should constitute one series. When objects are removed, their numbers should show blanks in the gallery books, and any new objects should be given the empty numbers as far as practicable.

The first gallery that should carry out this plan would have the distinction of being the only museum gallery in the world in which the ordinary intellectual needs of any visitors whatever, whether generally or specially interested, would be adequately met.

These needs are the following:

For the visitor with only general interests (1) the positive need of a general idea as to what is before him; and (2) the negative need of exemption from particular in-

formation both useless and distracting to him. For the visitor with special interests (3) detailed information immediately accessible about every object shown—since his special interest may be excited by any.

All museums without exception conspicuously fail in meeting every one of these needs. In all there are many objects which are not covered by any general or special sign. In all, many detailed signs, or labels, force upon the general visitor information worse than useless to him. In all, no information whatever, or no satisfactory information, is given in any form regarding a large proportion of the exhibits.

In a gallery furnished with the printed aids here proposed, there would be no object about which information would not be accessible to every visitor who wanted it, and there would be no information about any object given any visitor who did not need it. The signs and books are at once sufficient and necessary; instead of being both inadequate and redundant, as labels are invariably.

On entering such a gallery, the visitor would be informed by the high wall sign that the objects are of a certain kind, style and period, limiting dates giving a meaning to the period names to every visitor. If, with this information in mind, he inspects the exhibits, he finds signs connected with all objects not described by the wall sign.

If any object whatever in the room excites his special interest, he is informed at either doorway that the book which is placed there is for his use and contains information about the object at greater or less length. This information is given him for the asking in a much more detailed way than if it were presented unasked to every visitor in labels; and it is given without disfiguring the gallery as any thorough and plainly legible labelling must do.

But for the numbers, sometimes inevitable, and here inconspicuous by their light color, but not illegible by small size; but for an occasional sign on objects outside the general content of the room; and but for cards recalling the source of the objects, the works of art are installed alone without anything to interfere with their effect. Apart from these exceptions, the apparatus of information is withdrawn to a wall above, case frames or picture frames above and below, and into a book to be held in the hand. The exhibits are mainly free to produce their designed impression, and the visitor, while not left without any information he may want, is not forced to accept any he does not need.

IV

GALLERY BOOKS

WHAT IS A GALLERY BOOK?

The gallery book extends the principle of docent service from the spoken to the written word. It forms a type of museum literature hitherto untried. It does not aim to add to the scientific apparatus of the museum gallery, represented by the handbook, the catalogue, and its diminutive, the label, but to create an artistic apparatus not before represented there. It seeks to serve art immediately and not through the medium of science; aiming to contribute to its enjoyment and not to instruction by it. Pleasure, not knowledge, is the object sought.

The novel purpose of the gallery book is emphasized by two characteristics in which it differs from gallery literature hitherto in use. It differs from a guidebook in naming every object shown, and from a catalogue and from most labels by omitting items of information unnecessary in the presence of the object.

The gallery book is a fruit of the so-called æsthetic theory of art museum management. The agitation ten years ago, principally in Boston and New York, which set a didactic theory in total opposition to an æsthetic theory, owed its vivacity largely to a misconception of opinion. It was erroneously thought that the type of management advocated by the æsthetes disregarded every educational consideration, and that advocated by the pedagogues every artistic consideration. As a matter of fact neither of the disputants proposed to disregard the claims represented by the other. The entire question was one, not

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of choice, but of preference between artistic and educational ends. Admitting, as all must, that a public collection of art can and should serve both artistic and educational purposes, both enjoyment and instruction, which of the two purposes should take precedence in case there should arise a conflict between them? In a word, which is the paramount aim of a museum of art — its raison d'être? The didactic party held that instruction by its contents is the raison d'être of every museum; the æsthetic party held that when a museum is restricted by its charter to the collection of works of fine art, the enjoyment of its contents is its raison d'être. The æsthetic claim was based upon the undisputable truth that works of art are made, not to be learned from, but to be delighted in. Their native purpose to convey a message must be, it was argued, the controlling purpose of any institution seeking to preserve them.

The didactic theory was a traditional and instinctive view; the æsthetic theory a new departure, a first result of the application of mental effort to the question of art museum purposes. From the first, in the interest of their educational aims, museums had developed an apparatus of labels, catalogues, and handbooks aiding visitors to learn from what they see. The æsthetic theory at once suggested a complementary apparatus in the form of books aiming to help the visitors enjoy what they see. The gallery books as provided at the Museum of Fine Arts in Boston are such an apparatus. Like the docents appointed at the museum several years before, their purpose is mainly artistic. A docent explains exhibits. So does a gallery book explain exhibits. The chief object of both is to forward delight in things shown. Both are official companions whose foremost function is to aid visitors in grasping what the artists meant should be seen in their works, not what learned

men have since found out about the works. A clear recognition of the distinction between the mainly æsthetic purpose of the gallery book and the mainly didactic purpose of previous museum literature is essential to a correct valuation of the new device. In particular, the gallery book should, as independent literature, be unsatisfactory reading; the sense of incompleteness left with the reader being such as will impel him to turn to the objects of which it treats. To compose comment upon works of art with this effect in mind, is not an easy task, and early attempts can hardly be expected to do more than furnish a basis for progressive improvement.

PREPARATION AND MAINTENANCE OF GALLERY BOOKS (1) Text.

It is understood that the literary labor of preparing a book for a given gallery will be performed either by one of the Department officers or assistants, or, if by the Secretary of the Museum, will be carried out upon the basis of information supplied by the Department and the result submitted to the Department for amendment or expansion.

The first step is the close inspection of the individual exhibits and the taking of notes upon each. This process requires in general the removal of objects from the cases or shelves and often the aid of a microscope. A study of the literature relating to these and similar objects follows, the results of both reading and observation being compressed into brief notices of the exhibits, singly or grouped as occasion demands, with which may be combined a brief introduction, or appendix, historical or critical. The aim is to leave no single exhibit unremarked upon toward whose understanding a remark will aid. Often a number of exhibits may be sufficiently remarked upon collectively.

In case of need, the separate notices are given numbers, in which event the process of placing cards bearing numbers (described below) before or below each exhibit is a step in the preparation of the book. The individual notices with their introduction are then typewritten upon stencils (described below) ready for manifolding.

(2) Form.

The page measures $10\frac{5}{8}$ by $6\frac{3}{4}$ inches. The paper used is of the absorbent kind furnished for mimeographing by the Office Appliance Company. The covers are made of heavy dark brown cover paper $10\frac{5}{8}$ by 7 inches, front and back covers being independent sheets. The front cover is printed as follows in gold letters:

CLASSICAL ART Fourth Century Room GREEK AND ETRUSCAN MIRRORS

The books used in the galleries contain, below, in a square outlined in gold, the words:

Lending Copy
Not to be Taken
From the Room

These words are omitted on copies of the books offered for sale at the entrance. Below this:

Museum of Fine Arts, Boston

Three corresponding eyelet holes are punched in both covers and each page. Soft brown tape a quarter of an inch wide is then run through each and tied in the centre of the book. This binding permits either the removal of any page of the book for rewriting in case of changes of exhibition or the addition of new pages. The eyelet holes are guarded with Dennison's cloth patches gummed. The

result is a flatter binding than when metal eyelets are used and one better lending itself to changes in the books. The letter-press is confined to one side of the page in order to halve the labor of rewriting pages in case of change. A special advantage of the books would be lost unless they could be readily corrected for all changes of exhibition.

(3) Installation in the galleries.

For this purpose wooden pockets are provided consisting of a rectangular back $11\frac{7}{8}$ by $7\frac{3}{4}$ inches, of quarter-inch stock partly covered by a front $7\frac{1}{4}$ inches high, forming a pocket giving one inch of space from front to back in order to accommodate several books. A light, dull brown card $6\frac{1}{4}$ by $4\frac{1}{4}$ inches is glued to the centre of the half front bearing the words in dark brown lettering:

VISITORS ARE INVITED TO USE A GALLERY BOOK PLEASE REPLACE HERE

On the centre of the back above the half front another similar card bears the words:

THE BOOK
MAY BE OBTAINED
ON APPLICATION
TO THE CUSTODIAN

This is to make it possible for the custodian to remove the books on crowded days when it might be impossible to prevent their being stolen in numbers. Every few weeks one disappears at the Museum in Boston; nevertheless it is desired to keep them at all times available to visitors and the plan is being tried.

Two pockets are assigned to each gallery. They are

hung from screws fastened four feet three inches from the floor on any convenient wall immediately next the entrance to, and the exit from, each gallery. They are purposely not placed in the doorways in order to avoid doubt as to which room they refer to, and yet are hung near the doorways so as to be immediately available. The visitor can, if he please, take the book at the entrance door and leave it at the exit. The custodians are charged with the duty of seeing that the books are not taken away and do not go astray into pockets where they do not belong.

(4) Method of revision.

When any object is withdrawn from exhibition, or newly installed, in a gallery provided with books, all the books are taken up and delivered with notes of the changes to the Secretary of the Museum, who is charged with the duty of seeing that the corresponding changes are made in the letterpress of the books and in the numbering of objects in the galleries; and that the revised books are returned to the pockets without any avoidable delay. The responsibility of keeping all the books in the system up to date at all times thus rests on a single officer, who may demand any necessary aid to this end from others. The total responsibility for the system is divided into three definite shares: (1) for the matter of the books, on the department officers; (2) for their form, upon the Secretary of the Museum; (3) for their physical care, upon the custodians in the galleries. In a growing or changing collection the labor of keeping in gallery books a complete and accurate account of the exhibits would be very considerable, and should be minimized as far as possible. If exhibits are numbered to correspond with numbered paragraphs in a book, their rearrangement will not interfere with its use. When any objects are withdrawn temporarily,

a pencil note may be made in the books; if permanently, the corresponding paragraphs may be cancelled in ink. When an object is added, the paragraph relating to it may be typewritten in duplicate or triplicate and pasted into the book at the proper place and also added to the page file hereafter described. Books should be rewritten only when the changes in them begin to make them hard reading. The stock of books used to replace copies in the galleries or kept for sale should consist only of the books as originally written, dated to indicate the time when they exactly corresponded with the galleries. The labor required to keep these reserves also in accord with the current changes in the galleries would not be justified by any results in added information to the visitor.

(5) Apparatus.

An Edison mimeograph is used in manifolding the books. As each page is manifolded, a copy of it is added to a Page File of all previous pages written, and is numbered consecutively with them. The purpose of the page file is to keep available any information once gathered and put into form. To this end the number of each object in the registers of the Museum is written next the notice on the page of the file and entered in a card index kept in numerical order. In the registry system of the Museum objects are given a double number separated by a decimal, one number indicating the year when the object was received, the other its place in the list of accessions for the year. In the case of acquisitions, the year number comes first: in the case of loans, last. In the card index to the page file the two classes of numbers are written on different colored cards: white for acquisitions and blue for loans. Each card is ruled in two double columns of ten lines each. The first of the double columns contains the registry number, the second the number of the volume and page in the page file where the object is recorded. Each card, therefore, contains twenty registry numbers. When an object is newly installed in a gallery, the note sent in to the Secretary with the books to be revised contains the registry number of the new object, from which any previous notice ever given of the object in any gallery book can at once be found.

For the same end, — that of keeping past work available, — the cards of registry numbers in each department are preceded in the index by cards containing the titles of any introductions or appendices contributed by that department to the books, arranged in alphabetical order.

The page file is kept in loose-leaf binders containing about two hundred pages each and numbered as Volume 1, 2, etc. The references to the page file from the registry cards consist therefore of two numbers, one the volume, the other the page.

As each book is written, it is added to a *Current File* of books. The current file, therefore, corresponds accurately at all times to the books as they exist in the galleries. It was at first proposed to file and index each stencil; but they are so quickly written and so troublesome to use again that the plan of preserving them has been given up.

The gallery books are manifolded in general in editions of fifty. Two are placed in each gallery, two at the door of the Museum for sale, one in the Department library, one in the current file, and the pages of one in the page file. The covers of those for sale are dark green and are printed without the notice that the book is a lending copy. It is found that two months' use in some cases may soil the gallery copies enough to demand replacing them.

When a book is revised, the copies installed in the galleries are withdrawn and the revised copies substituted.

The pages changed are added, together with any new pages, to the page file, which thus in course of time comes to contain many pages in part reproducing each other. Books may be discontinued, but as their pages remain in the page file, the information gathered about the objects they record remains available. That portion of the stock of each book which is not immediately used is kept assembled ready for binding in envelopes to protect it from dust. Each of these envelopes is marked with the name of the book within: that is, with the Department, the gallery and the exhibit recorded in the book; and with the date when the book was completed.

The numbers used in the galleries are printed in dark brown ink on light brown cardboard, three eighths of an inch square. These can be laid on shelves or glued to mounts or pedestals or mounted on frames. The numbers are regarded as a necessary evil of the system, and it has proved possible to avoid their use much more often than was anticipated. They are unavoidable only in the instance of a great number of objects not easily distinguished by description. It is found that the actual number of separate exhibits in one room of average size in a museum of fine arts is in general much smaller than would be supposed. Perhaps two hundred individual exhibits might be taken as an extreme limit, and even when there are so many, they may be grouped in cases and on shelves so as to render numbering unnecessary. When a numbered object is removed from exhibition, it is the duty of the officer making the change to remove the number with it. When an object needing a number is installed, the officer indicates with the notice of it the number it should have. It is to be noted that the rearrangement of a gallery would not necessitate any change in the books, any numbers there used following the object. Further, the withdrawal

of numbered exhibits, while it would cause gaps in the numerical series recorded in the books, would still leave them in order and not interfere with their convenient use.

The case may arise that inscriptions or drawings or illustrations are necessary or desirable in the books. With the aid of the Edison-Dick Mimeoscope, classical or oriental lettering, plans or any other matter drawn with the pen may be inscribed upon the stencils and manifolded as perfectly as the typewriting. The addition of such matter would in these cases be the last step in preparing the books.

The response of the public to the offer by a museum of information about each object it shows cannot yet be gauged, but it is self-evident, first, that the offer of all-inclusive information is the ultimate ideal of any exhibition, and further that labels give information so meagre as often to be misleading. It would appear that some method, akin to that at present attempted in Boston, of giving, in the galleries, adequate information about every exhibit, will be regarded in the museum of the future as an essential requisite of good management.

Note on the Development of the Plan of Gallery Books. Gallery books are the outgrowth of a descriptive chart which the late Okakura-Kakuzo, Curator of Chinese and Japanese Art at the Museum of Fine Arts in Boston until his death in 1913, provided in 1906, instead of labels, for the exhibits in the Japanese Cabinet of the old building in Copley Square. The report of the Department for 1906 states as follows:

No labels are placed upon any of the objects in the cabinet, but upon the seat in the centre of the room are kept several printed or typewritten descriptions of the various exhibits, together with a plan of the room showing their location.

Three years later, workers in the galleries of our new building during the summer before it was opened had the rare privilege of seeing how museum installations in general look without labels. The impression was that of ideal conditions, surely to be realized in the museum of the future. The objects seemed at home with each other and in the halls. In the absence of any suggestion that they were charity patients occupying labelled beds in wards, they were able to create about themselves a little world of their own, most conducive to their understanding.

A month before the building was opened, in October, 1909, it was suggested to the administration of the Museum that general use should be made of Mr. Okakura's method throughout the galleries, these "books of the room" to be hung in the doorways as lending copies. During the following year — 1910 a descriptive chart was prepared for the Italian Sculpture in the Renaissance Court, which had not yet been labelled. This chart was printed in a small edition, a number being kept in the Court as lending copies. At the same time, in the Mastaba Room of the Egyptian Department, the device was developed by Mr. Louis Earle Rowe, at present Director of the Rhode Island School of Design, then Assistant in the Department, into a "Gallery Leaflet" which he described in a paper with this title read at the meeting of the American Association of Museums June 1, 1910. During the spring of 1911, by adding descriptive and critical notes to the chart used in the Renaissance Court it was developed into a gallery book of the form since adhered to: and on May 23 the scheme for gallery books was described in detail before the American Association of Museums in the essay on the "Problem of the Label" reprinted in this volume.

In the autumn of 1911 it was proposed to prepare and maintain a system of gallery books in any one of the departments of the Museum that would offer itself as an experiment station; and two years later, in the summer of 1913, the late Okakura-Kakuzo accepted the invitation on behalf of the Japanese Department. Books have been prepared and installed in rapid succession since that date. The system was formally adopted by the administration of the Museum through a vote passed July 15, 1915, placing it in charge of the Secretary.

Present

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GOVERNMENT

THE IDEAL OF COMPOSITE BOARDS— SOME GENERAL PROBLEMS



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GOVERNMENT

THE IDEAL OF COMPOSITE BOARDS—SOME GENERAL PROBLEMS

Ι

THE DAY OF THE EXPERT 1

The papers read before the American Association of Museums during the eight years of its life have covered a wide range of topics, reaching, one might imagine, the whole circle of museum interests. Yet there is one question, antecedent to all others, which has never been asked, and but once approached, in your presence. I recall with pleasure that the speaker who approached it was our present host and my immediate predecessor in the office of president. This is the question: Just what use are all these papers? We meet to develop and exchange our ideas; but when we separate, what power have we to put into effect what we have concluded and learned? We have the voice here. How much voice have we at home?

This question of official scope we share with every similar association; and with several it has recently become a burning question. Just a year ago there was formed an association of university professors for the determination and maintenance of professorial rights; and last winter the American Political Science Association, and the Philosophical and Psychological associations appointed committees to consider and report upon like matters.

¹ Presidential Address at the Milwaukee-Chicago meeting of the American Association of Museums, May, 1914. Reprinted in the *Proceedings of the Association*, vol. viii (1914), and in *Science* (N. S.), vol. xxxix, no. 1013 (May 29, 1914).

A problem of problems like this offers appropriate matter for an initial presidential address; and its simultaneous agitation elsewhere suggests treating it in the broadest possible way — as a concern, not of one profession, but of all professions. Thus amplified, the topic becomes that of the present and future status of the specialist in the United States. Far as this theme stretches beyond the work of the permanent public exhibitions we call museums, the inquiry into the day of the expert is one that vitally touches the whole official activity of every museum worker.

The inquiry naturally divides itself into four: What has been the position of the expert among us? What change suggests itself? What are the bearings of change? What are the prospects of change?

We shall offer replies to these questions in succession: (1) by arguing that the prevailing attitude of institutions of the humanities in this country toward their expert employees is out of date; (2) by specifying a reform that would bring it up to date; (3) by meeting criticisms of the new order; and (4) by noting its approach. We shall describe an outgrown condition, state and defend an adjustment, and report progress toward it. A glimpse of the past will lead to a glimpse of the future.

By expert will here be meant a person whose achievements demand special aptitudes long exercised; and by his day a time when these developed abilities are used to the best advantage of the community.

For the expert in this country, to-day, according to frequent remark, is not such a time; but there are signs that to-morrow will be.

Here and now, the work of the expert is largely carried on as a branch of corporate activity. Our men of science, pure and applied, our lawyers, doctors, educators, clergymen, social workers, artists and students of art, while they may practise their specialties alone, very commonly also serve some corporation, and in great numbers serve a corporation exclusively, as do most of us assembled here.

A corporation is a body of men empowered by the State to join in a certain purpose, and held responsible for its due fulfilment. At the end of his brief and hampered career as Premier of England, Lord Rosebery is reported to have said: "Responsibility without power is hell." To be discharged successfully, duty must be coupled with corresponding authority. This is the foundation principle with which any study of the corporate sphere of the expert must begin. A corporation engaging the aid of a staff is responsible at once for every detail of their action in its service, and for every detail of their outside life, in so far as this reacts upon their official activity; and hence possesses equivalent rights of control, subject only to law and custom.

Rights of total control presuppose in turn competence for total control. To insure it, two methods of selecting the membership of a corporation are possible. In giving a certain purpose into the sole charge of certain persons, regard may be had either to the purpose chiefly, or to the persons chiefly; to their special competence, or to their general competence.

In the history of this country, the choice among men of the professions concerned was a colonial method; that among men of ability, however displayed, has been our national method.

The colonial method was an inheritance from the Old World. Leonardo da Vinci is spoken of as the last European to take all knowledge for his province. With the development of the sciences and the arts after him, even men of commanding powers became specialists. Following the example of the mother country, the colonies placed

their first colleges under the control of educational experts—in the main their clerics par excellence, or clergymen. An interpretation of the charter of Harvard College of 1636 given later by the colonial legislature, affirmed that the corporation was restricted to members of the teaching force; as the corporations of Oxford and Cambridge in England still are. The charter of Yale College was issued in 1701 to ten clergymen, and provided that their successors should always be clergymen.

At the birth of our nation, the emphasis turned from purposes to persons, under the compelling force of two causes: the parity of our voting citizens and the conditions of a new national life.

From the beginning of the new union one man was as good as another at the polls. Every vote cast was given the same weight. It followed that the recognition of the likenesses of men became dominant, and the recognition of their differences obscured. Leading men came to be thought of as like exponents of the sense and efficiency of the community. The acknowledgment of competence took the form of an acknowledgment of general competence. We of the United States have been nurtured in the belief that a man who has distinguished himself in any one direction will also distinguish himself in any other.

Our early national experience confirmed the belief at every turn. Pioneer conditions bring out the all-round man. The solid citizen in a new community is called on to be at once a farmer for sustenance, a manufacturer for clothing, a builder for shelter, and a soldier for defence; often also a lawyer for justice, a doctor for the body, an educator for the mind, or a teacher for the soul. The nascent civilization of the United States had its Leonardo da Vinci in Benjamin Franklin. Nor has our later progress yet thoroughly dislodged the ideal of the all-round

American, fit for any task. The subjugation of a continent is in the main a business matter, and an able man may learn a business in all its branches. The practice of naming any capable person for any office has maintained itself among us because surpassing excellence has not for the most part been essential. We have fought successful wars with citizen soldiery and grown great in peace with practical men as intellectual guides. To Amiel our democracy announced an era of mediocrity; Schopenhauer called us a nation of plebeians; an Austrian royal visitor missed among us the sense of personality — the perception of that delicate but real differentiation that makes each man himself and no other. This is the mark left on the society of the United States by our day of small things.

That day is now past; and it behooves us to examine the foundations of the emphasis which our methods of assigning responsibility impose upon persons instead of upon purposes, upon general repute instead of special fitness. When examined, our course proves an aberration from that of colonial times learned in Europe. We must go back upon history; but only to go on to a new social ideal which shall square at once with our political creed and our existing national conditions.

First, as to our political creed. The parity of voters obscures, but also implies the difference of men's capacity. In affirming that persons of a certain sex and reaching certain mental, moral, and economical standards should be counted alike in the process of government, it presupposes others who do not possess these qualifications and are not to be counted at all. The conception of the equal distribution of capacity among men is negatived by the political device itself which fostered it.

It may be asked: What then becomes of the belief that

men are created equal? If that renowned assertion does not mean that one man is as good as another, that all persons would show like capacity with like opportunity, what does it mean? Something totally different. Did it claim that every babe new-born might under favorable circumstances become what any other may, it would seek to persuade us that males might become mothers. Instead of this and other absurdities but little less glaring, it proclaims the logical postulate that all real differences of human capacity are sensible facts of the present world. In Jefferson's glowing words, the inhabitants of this created frame bring none of their disparities with them from the invisible. There are no such things as divine rights, withdrawn from human scrutiny. The doctrine of equality affirms that only those persons who show themselves different should be treated differently. Its motto is the Roman challenge "Aut tace, aut face" — in modern American "Put up or shut up." True democracy is scientific method applied in politics. It accepts as inevitable in the political sphere also what Huxley called the great tragedy of science, "the slaughter of a beautiful theory by an ugly fact." The belief that a man who has shown exceptional powers in any one direction will also show them in any other is such a beautiful theory, exposed by our political creed to slaughter by ugly facts. Within narrow limits they confirm it. A capable farmer or efficient selectman will in all probability prove a good teacher of the rule of three, or a good postmaster. Beyond narrow limits they disprove it. Probably neither could teach Abelian functions well, or manage a wireless station. But whether verified or falsified, it is not the generalization itself, but the test of it, which is the sum and substance of the principle of equality. This is a doctrine of method, not a statement of results. It repeats in modern words

the ancient injunction: "By their fruits ye shall know them." It is the merit system generalized. Admitting all verifiable disparities of human capacity, and excluding all mystic disparities, the equality of the Declaration is simple common sense. Denying them all indiscriminately, the equality of its interpretation is literally nonsense.

Second, as to our national conditions. They are no longer those of pioneer life. The task of leading the civilization of the United States has ceased to resemble a business. No man, however able, can learn it in all its branches. Growth, as is its wont, has developed heterogeneity from homogeneity. The arts we now practise have become as long as the lives we can devote to them. Our farmers, our manufacturers, our builders, our soldiers, our lawyers, our doctors, our educators, our religious leaders, are now different persons, each given wholly to his work. The era of the all-round man has at last gone by for us also, as centuries ago it went by for the old world. The excellence that comes alone from the long exercise of special aptitude is everywhere demanded, and the demand is everywhere being met. The era of mediocrity, the nation of plebeians, is on its way to bringing forth aristocracies of demonstrated ability, and the sense of personality, the recognition of that delicate but real differentiation that makes each man himself and no other. will not long delay its advent.

The democracy of individuality, the democracy that accepts all proven differences and no other, is the new social ideal, squaring at once with the creed of our fathers and our own conditions. With our political creed, for the doctrine of equality, in denying all supersensible differences, stops short at the sensible world. Personality is its presupposition. With our national conditions, for the all-round man is bested in every line by the exceptional

man in that line, and only the best has become good enough for us. The Jack-of-all-trades is master of none, and our progress calls for masters everywhere.1 Finally, the democracy of individuality makes for the union in which there is strength. The new ideal is not that of a society of persons increasingly like each other, and hence increasingly sufficient each to himself, but of persons increasingly different each from the other and hence increasingly necessary each to the other. While the Declaration proclaimed our independence of other peoples, it assumed our interdependence among ourselves. A citizenship of similars is like the sand, composed of particles each as complete as any and with no tendency to cohere; and a political house built upon it will fall. A citizenship of dissimilars is like the rock composed of particles supplementing and cleaving to each other; and a political house built upon it will stand.2

But we have not yet acquired the courage of our fundamental political conviction, nor yet thoroughly adjusted ourselves to our larger life. The administration of collective enterprises in the United States is at present in a state of unstable equilibrium. The question of the corporate sphere of the expert is not yet settled because not yet settled right.

While the actual fulfilment of corporate purposes has in general grown beyond the competence of any but those of special aptitude long exercised, our national habit persists of placing these purposes in charge of men of ability

² "Democracy must show its capacity for producing, not a higher average man, but the highest possible types of manhood in all its manifold varieties, or it is a failure." J. R. Lowell, Harvard Anniversary Address, November 8, 1886.

^{1 &}quot;We shall never rise to our opportunities in this country and secure a proper discharge of the public business until we get over our dislike of experts." Associate Justice Charles E. Hughes, in an address at the Thirty-ninth Annual Meeting of the New York State Bar Association, January 14, 1916.

however displayed. Any conspicuous success, especially financial success, opens the way to a position of corporate authority. The necessary result is a permissive system of control. A corporation among us executes its trust by choosing paid assistants of the special ability required, and permitting them to carry out its purposes more or less in their own way. This situation of power perforce in abeyance is one of unstable administrative equilibrium. What is permitted can also be forbidden, and may at any time be forbidden by an authority alive to its responsibility and conscious of its power. In this event two rights to control come into conflict: the right based on capacity and the right based on law. The uncertainty of the situation is plain in the case of institutions of the humanities. Only an Orientalist can determine what antecedent study should be demanded for a course in the Vedas, only a technician whether quaternions should be used in teaching engineering, only an experimenter when a culture should be transferred from sun to shade, only a librarian what system of shelf numbering is applicable to fiction, only a surgeon how to conduct an operation in tracheotomy, only a religious leader to what spiritual exercise to invite a soul in need, only a curator how to install an ecological exhibit or make a collection of prints tell on the public, only an alienist how to control melancholia agitans, only a social worker how far the same methods of help are fitted to Syrians and Chinese. Yet others make up the boards on whose responsibility, by whose authority, and at whose option such decisions are taken. The permissive system settles the question of the corporate sphere of the expert but temporarily; leaving competence subject to impotence. It presents a problem, and one only to be solved by the union of the two potentially opposing rights. In the end, capacity must be given a legal standing. The skill demanded of the employee must be represented among the employers.

In contrast with the permissive system of control, that exercised according to this conclusion by a composite board may be called the positive system. The terms refer respectively to the power of veto and the power of fiat. The positive system proposes that a corporation shall be constituted with a competence as all-embracing as its authority. Concretely and considering charitable foundations only, it proposes that professors in our colleges and technical schools shall be represented among the trustees of those institutions, librarians and heads of departments among those of libraries, scientific men among those of institutions of research, physicians among those of hospitals, clergymen among those of religious establishments, directors and curators among those of museums, social workers among those of foundations for popular betterment. In the most general terms it claims that any corporation should include members embodying in their own persons the special types of skill essential in carrying on its work. This claim is based on the conditions of permanent efficiency in collective enterprises. Its recognition is growing among us and will one day be general. That day will be the day of the expert.

Such a change in the make-up of corporations in this country may be said to round out an organization which practical sagacity has already partially developed in foundations of private origin and public aim among us. The men of general repute which it has been our custom to choose for positions of charitable trust have acquired by the logic of events their special necessary function in the fulfilment of these trusts. This function is that of winning support for the institutions they control. In our own country more than in any other, corporations not for

profit are the fruit of private initiative. The first requisite for their establishment and maintenance is the selection of a board of trustees whose names, with those of their successors, will be an earnest of coming gifts because a guarantee of their safe and conscientious handling. Before we can do anything, we must have something to do with. But although ample and assured support is a condition necessarv to the success of an institution, it is not a condition sufficient to success. A function equally necessary, and with support sufficient, is that of the accomplishment of purpose. This is the second and no less exacting half of the task; with us overshadowed by the first, because the accumulation of our wealth has outrun our provision of knowledge and skill to utilize it. The positive system of control repairs this omission, now out of date. It supplements our present provision of means by providing also for ends. It would impose the total charge of an institution upon a body fitted to bear both halves of it. Neither the men of social and financial standing who now compose the boards of our charitable institutions, nor the specialists now active in their aid, but now commonly excluded from those boards, are equal to the whole duty. Only men of affairs are competent to the business management of their trust. Only men in comparison withdrawn from the public eye in the long exercise of special aptitude are competent to its professional conduct. The men of means and the men of ends must join forces in order to the best achievement of their common purpose.

The practical application of the principle of control by composite boards presents various questions.

Is the demand that all the different forms of professional skill utilized by a corporation shall be represented therein an ideal realizable in the instance of large institutions? Theoretically no; practically yes. All the expert

ability employed will in a measure be represented by each professional member; and by rotation in office among them, the recurrent grasp by the board of the affairs of the foundation may be extended to minutiæ in any degree.

Again, is it wise to place experts in charge of experts? The point may be debated, but is irrelevant. The positive system does not propose to do so, but to give them a share in controlling others. The question — Who shall decide when doctors disagree? — finds its answer when another equal authority is present to add considerations beyond the scope of either. Such deciding voices are provided for in the composite boards contemplated in the positive system. Its ideal is that every form of consideration which enters into the work in hand shall have its representative in the body which controls.

Again, should the experts employed by a charitable corporation be eligible thereto, or ought its professional membership to be chosen outside? Choice from the staff suggests a double doubt. Suppose a superior officer and his subordinate chosen; would not their equality on the board weaken the administrative control of the superior? No; for the equality is that of ultimate authority. The superior exercises his control as the delegate of the inferior as well as of himself and others. The inferior who disputed it would question his own right. There is no surer means of interesting any one in subordination than to give him power. The doubt has another bearing. It also reflects the importance of the individual interests at stake in the case of employees. Will not their concern for their pay as a rule dominate their concern for their work?

The democracy of similarity says yes. The craving for money is the dominating motive in all men at all times. The democracy of individuality says no, basing its reply on a distinction. As social affairs are now arranged, some money is a perpetual necessity to us all, hardly less inexorable than the air we breathe. Else why should men and women still starve among us? But more money is an increasing luxury, the desire for which may be outweighed by many other interests. The auri sacra fames is an illegitimate child of the hunger for bread. In the case of the paid expert in a charitable corporation, some money is at most times assured, and motives are at all times present capable of tempering the desire for more. There are thus two reasons why his interest in his pay will not certainly dominate his interest in his work. His salary, while always moderate, is within limits safe; and the long exercise of his special aptitudes is at once fruit and source of motives apart from those of gain. The patience with which the specialist follows his task is the result of the fascinating germinal power of the ideas upon it of which his brain is the theatre, and which his hand transfers to real life. They may become an efficient anti-toxin for the cacoethes habendi. Those who have had much to do with experts can echo the statement of Renan: "The reason why my judgments of human nature are a surprise to men of the world is that they have not seen what I have seen." 1 To admit a rule by which experts when paid shall be excluded from charitable boards is to commit the absurdity of at once recognizing the exceptional man and treating him as if he were like all other men. Other grounds of bias, the desires for honor and power, unpaid members share with him. The receipt of pay as well will not disqualify those worthy of it.

Again, how are the permissive and the positive systems respectively related to the rights of free thought and free speech? These universal rights, so-called, are in essence duties of men in power. They should see to it

¹ Souvenirs d'Enfance et de Jeunesse, p. 221.

that they do not so uphold the social order as to bar its advance. While all authority, therefore, is obligated to reduce to a minimum its repression of ideas and their utterance, no organization of control will absolutely prevent all danger of too high an interpretation of this minimum. But a system by which seekers after truth in corporate service themselves share in the management tends to keep it within bounds. The positive system of corporate control thus obviates a danger to freedom inherent in the permissive system. It comes to the aid of free thought and free speech, entails a liberation of the spiritual forces within a nation.

The inclusion in charitable boards of men experienced in the actual accomplishment of their purposes is not new in this country either as a fact or an ideal. Their representation, never wholly lacking, is growing, and its extension is advocated with authority.

Frequently, if not commonly, a single chief executive officer, the head of the staff, is included in the board of trustees. The old ideal of the all-round man lingers in this provision, here swollen to impossible proportions. The admitted difficulty of finding satisfactory executive heads for institutions of the humanities is the sign of an unreasonable demand upon human capacity. No single executive, however active and talented, can embody in himself various types of modern professional knowledge and skill. The due representation of men of ends in any considerable corporation will always be a number greater than unity. A fair fraction of the board must be selected from their ranks. The demand upon the executive is thereby decreased to the manageable portions of a business leadership, either with or without a special professional function.

Specialists have found a place already in a number of

our scientific and artistic corporations. The charter of a noted scientific school, affiliated with a university, stipulates that of the corporation of nine, one third shall always be professors or ex-professors of the school. In another institute a larger proportion are persons in immediate control of the scientific work. No commanding need of appeal to the community for financial support existing in these cases, the men of ends have taken their natural place in the management along with men of means. Among museums of art more than one has chosen trustees from its own working staff and those of neighboring institutions.

In our chief universities, it has become the practice to allow the alumni a large representation in the board of trustees. Of the two bodies of persons concerned in the actual achievement of the teaching purpose, the teachers and the taught, this practice accords to one, the taught, its share in ultimate management. The provision suggests, and may be believed to announce, a second, by which the other body, the teachers, will gain a similar representation. The class of alumni trustees has for its logical complement a class of faculty trustees; a class more indispensable to vital university success than their predecessors, in that they represent not the subjects but the source of university discipline. The step has found prominent advocates. In the "Atlantic Monthly" for September, 1905, President Pritchett asks, "Shall the university become a business corporation?" He suggests that the business of graduating men has little to do with the art of educating them, and concludes, "In the settlement of the larger questions of administration . . . may not some council composed of trustees and faculty jointly share the responsibility to advantage?... To-day we need, in my judgment, to concern ourselves in the university with the spiritual side of administration." In articles entitled "University Control" published in "Science" in 1906 and 1912, Professor Cattell proposes that professors should take their place with alumni and interested members of the community in the corporation of a university, and reports favoring opinions from a large majority of those holding the most important scientific chairs in the country. In his report for 1911–12 as president of Cornell University, Dr. Schurman writes: "The only ultimately satisfactory solution of the problem of the government of our universities is the concession to the professorate of representation on the board of trustees or regents." Such agreement in a recommendation is a prophecy of its acceptance.

When the day of the expert arrives, every corporation employing specialists will have its class of professional members, whether in a majority or a minority, whether chosen within or outside the staff, whether for limited periods or without term. Historical causes have both denied and begun to restore to expert ability in this country a place in the corporations to whose work it is necessary. The system of positive control by composite boards is a final settlement of the question of the corporate sphere of the expert because the right settlement, granting to competence its share in the management of competence. The day of the expert brightens on the horizon. Let us welcome its advancing beams. Either we ourselves, or our early successors, will be called to labor in its full sunshine.

¹ A suggestion looking in the direction of combined control of the British Museum was made eighty years ago (July, 1836) by a Committee of Enquiry appointed by the House of Commons. "A board of officers, reporting and recommending to the Trustees on matters of internal arrangement, would be a further means of greatly benefiting the institution, and would obviate the complaints of the heads of departments as to the want of proper intercourse with the Trustees." Edward Edwards, Administrative Economy of the Fine Arts (London, 1840), p. 132.

ADMINISTRATIVE ORGANIZATION AND ITS TWO PERTURBATIONS ¹

Administrative organization differs from other kinds in establishing the relation of superior and subordinate. Runners might agree to relay a message, or porters combine to carry a trunk, without any being over or under any other; but in an administrative bureau authority exists in grades. Administration (from the Latin ad, to, and minus, less) expresses subordination and implies superiority.

A superior is he who commands; a subordinate he who obeys. A superior issues orders; a subordinate executes them. But before an order can be given and executed there must be an agreement as to who shall give it and who execute it. Appointment precedes command. A channel of authority must be laid down before the authority can be exercised.

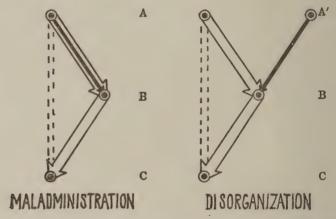
Administrative machinery is subject to two cardinal forms of derangement — one functional, one structural. Both are diversions of authority from its appointed channel; but the lighter affects authority only, the graver involves also appointment. The lighter may accordingly be called maladministration, the graver disorganization.

In the accompanying illustration these two administrative ills are exhibited in two figures. The dotted circles A B C represent official positions; the heavy black arrow represents the appointment of B; the outline arrow represents the channel of authority or the orders which fol-

¹ Reprinted from the Proceedings of the American Association of Museums, vol. x. (1916.)

low it. The dotted lines represent the vicious exercise of authority. This appears in the aspect of short circuits. In administrations of all kinds such divagation of authority is called "going over B's head" or "interference with B."

A joint meeting of two committees of certain trustees—a committee that managed their finances and a committee that managed their school—was once called to consider financing a school building. A building committee of the same trustees was already in existence. Soon



after the conference convened, one of the members spoke as follows: "It seems to me that when the trustees have asked some gentlemen to attend to certain business for them, they ought not to step in and do a part of it themselves." All present assented, and after voting to invite the building committee to consider the question in hand, the joint meeting adjourned *sine die*. The action inadvertently and very naturally contemplated by the conferees was abandoned as soon as its nature as an administrative short circuit was clearly set before them.

This utterance of practical wisdom contained in germ the whole theory of administrative organization. Addressing the assembled gentlemen as if they were a meeting of the board of trustees itself, the speaker admonished them that having appointed a subordinate body — namely, the building committee — to a certain duty, they were now preparing to go over that subordinate's head. The remark brings out the fundamental fact that the sphere of a superior is his subordinate, not the subordinate's work. The work is the sphere of the subordinate; whose appointment to it automatically dis-appoints others, his superior among the number. A superior cannot do; he can only order done by the proper subordinate. The lesson of the remark may be put into the form of the following general formula for normal administration:

Anything that is proper for a subordinate to do is improper for any one else, including his superior.

The reason why an act in an allotted sphere is normally improper for any one other than the person to whom it has been allotted is that it in so far forth nullifies the allotment. In particular, for a superior to allow himself or a third party to do the work of his subordinate is to appoint himself or the other for the time being in the subordinate's stead. It is, in a word, the supersession of the subordinate.

Two cases are possible: either the subordinate is the appointee of the person superseding him, or he is not. The two diagrams represent the two cases.

1. The subordinate is an appointee of the person superseding him. He may be superseded either for a cause in the conditions of the enterprise administered or without such cause. If for cause, the supersession is of the nature of punishment, not a normal condition, but an attempt to correct abnormal conditions. If without cause, the supersession is again abnormal, being of the nature of a revision of judgment on the part of the appointing power. It is a change from the administrative structure once decided upon. It is an example of vacillation in the management of the organization. It is further a discouragement to the official temporarily relieved of his duty. His plans of work are set in abeyance from no fault of his own. It is therefore doubly a case of administrative inefficiency. In a word, it is mal-administration.

There is a case in which a superior may temporarily perform a subordinate's duty without superseding him. This is the case in which his duty is assumed in order to show him how to perform it. Such a temporary reallotment of duty is a part of his instruction and not a part of his official work, unless indeed extended until it implies that the subordinate is slow at his lesson. In this event it takes on the punitive tinge.

2. The subordinate is not an appointee of the superior usurping his duty. Such action on the part of a superior constitutes a defiance of the authority making the appointment. It confronts this authority with a hostile organizing act. It is not a lapse, but a breakdown of the organization. In a word, it is dis-organization.

In a complex organization an official may be at once superior and subordinate; and his superior may himself be also a subordinate and his subordinates also superiors. Toward his superior the duty of any official is to execute the superior's orders and to abstain from executing those of any one else. Toward his subordinates the duty of any official is to give orders to them and to them only — not even to himself in their stead. It is to be noted that in practice any personal relations between members of the same organization outside of the established channels of authority need to be watched lest they assume an official tinge and thereby tend to short circuit the organization and diminish its efficiency.

An official may be tempted to overstep the appointed

channels of authority in both ways. As a superior he may find it easier to get something done within a subordinate's sphere by doing it himself or getting some one else to do it than to order it done by the subordinate. This is notably the case when there is not entire harmony of ideas between subordinate and superior. As a subordinate an officer may find it easier to do something within his sphere by obtaining for it the authority of some one else than his superior, who may not share his opinion of its importance. The authority of some power superior to both may be invoked. When the course in question is important, the temptation may be too strong to resist. Nevertheless, the duty of the forthputting official is plain and the corresponding right of the officer interfered with is plain; and any such short circuit gives a prima facie cause for complaint. But the sin of passing beyond superiors by no means besets subordinates as the sin of going over the heads of subordinates besets superiors. As usual in human affairs, the greater fault is with the stronger party.

Much administrative friction and many dangerous administrative blazes arising from these personal ambitions and differences might be avoided were official right and official duty clearly evident to those involved, as these diagrams present them.

Nevertheless, there may in any case be good reason for dissatisfaction either with the orders of a superior or the acts of a subordinate. A certain capacity to adjust itself may be assumed as proper to a living organism. Some right of appeal from a superior and some right of the supersession of a subordinate is therefore a condition of the maintenance of any administrative organization in normal functioning.

The only appeal applicable to all cases is an appeal to

the highest authority in the organization. Hence, the right of appeal to a monarch or to the presiding officer in non-political organizations is universally recognized as an inalienable privilege of any official, even the humblest. It is also a forcible but justifiable means by which an ultimate authority may be called upon for a review of the acts of a subordinate. Such occasional reviews are always wholesome and not infrequently necessary. At the same time an appeal is in effect a criticism of the officer appealed from and nearly or remotely suggests his removal.

A correlative right of supersession is also recognized when employed as a diplomatic means of inviting a subordinate to perform his duties better, if not to relinquish them. Like a signal for trumps at cards, an extraordinary act — in this case the performance by a superior, or by some one else designated by him, of a subordinate's duties — is used to attract the notice of the person concerned to a need that he can supply. The need here suggested is that of better work, perhaps by some one better qualified. An official should, therefore, always be alive to the possible meaning to him of a notable invasion of his sphere by a superior. Only two alternatives are possible: either the superior has given the subordinate just cause for complaint against him, or has taken a delicate method of signifying causes for complaint against the subordinate. If the subordinate suspects this dissatisfaction, let him bethink himself or offer his resignation, lest discipline or removal follow. If not, and if these diagrams show that he has cause to complain, let him enter his complaint promptly, discreetly, and resolutely.

EXECUTIVE ABILITY WITH AND WITHOUT QUOTATION MARKS

Written with quotation marks "executive ability" is familiarly interpreted as the capacity to "make the other fellow do all the work." As such, the business value of the trait is often insisted on, albeit with a touch of sarcasm. Stated more formally, "executive ability" in this sense is a certain gift at turning responsibilities over to others in a way to leave one's self free for manœuvres to hold one's post or get another. These manœuvres consist largely in so framing executive orders that, if they succeed, one can seize the praise, and if they fail, one can shift the blame. Also familiarly and also with quotation marks, this art is called "the art of administration." According to the claim of an acute subordinate in one of the bureaus of pre-war times at Washington, its head exhibited powers in this direction amounting to positive genius.

What is an executive, and how can he display ability? An executive is one who sees that legislative enactments are carried out. He displays ability when he succeeds in getting them well carried out. Hence, executive ability implies a sympathetic understanding, first, of the orders, and second, of the subordinates who are to fulfil them. The able executive must believe in the enterprise and know enough about it to criticize the execution of the orders. He must also believe in his subordinates and appreciate their needs of opportunity, of reward in recognition or in pay, and upon occasion of reproof — the three conditions of their best coöperation. Both qualities — an understand-

ing of the work and an understanding of the workers — are essential to that unification of an administration, that esprit de corps, which alone makes it effective. The able executive is he who possesses both.

These two qualities prove upon examination to be the opposites of the two indicated by quotation marks. It is true that an executive watches the work of other men; yet if his own mind and soul are in it, too, he will inevitably be led to put no little of himself into the transmission of his orders. Instead of scheming to retain his task, he will be full of plans for putting it through. Instead of looking about for other tasks, he will have no eyes but for his own. And if his mind and soul are with the men beneath him, he will seek neither to elude criticism nor purloin credit; for, while confident in his own powers, he will realize his need of their willing help.

Such is the effective leader of men, — he who gets the most out of subordinates; the able executive, the true artist in administration.

A man may possess the first qualification without the second, comprehending the work but ignoring the workers. This is the driver of men, he who impels others to do what they have no heart to do. Adding the second qualification, he becomes the leader, he who shows others how to get what at heart they want. Napoleon showed his soldiers the way to glory, General Booth his comrades the way to salvation. The record of both testified to their supreme competence for their tasks.

Thus the quotation marks about the phrases "executive ability" and "the art of administration" prove when traced to their source to be the ear-marks of incompetence. He who seeks mainly to consolidate himself or secure his retreat advertises himself in fear of discovery. He who shirks blame and steals praise advertises himself as merit-

ing one and unworthy of the other. He is the man in the wrong place — the bureaucrat. Both the immense development of administrative responsibility in modern times and the immense difficulty of putting men in their right places are signalized by the current development of bureaucracy. To quote the titles of Émile Faguet's brilliant books, it is the "Cult of Incompetence" in modern democracies that issues in the "Horror of Responsibilities" which emasculates their servants. Circumlocution Offices, and men with an official task, intent on "How not to do it" are plentier now than in Dickens's time; from the rustic "leaning out" his taxes against an inactive shovel on a highway, to the department chief doling out the letter of the law between cigars and gossip in a government office. Since the Great War began, urgent necessity has put not a few men among us in their right places. The lesson of their survival must not be lost if the phrases executive ability and the art of administration are permanently to lose their quotation marks in our familiar speech.

THE ECONOMICS OF A CHARITABLE FOUNDATION

1. An enterprise begun by charity may or may not continue by charity.

A CHARITABLE foundation consists of property given in trust for a public purpose. In carrying out this purpose, either the property itself or its usufruct may be applied. If only the usufruct and not the property, the enterprise may be continued indefinitely without further gifts, since usufruct under normal circumstances is forthcoming indefinitely; but if the property itself is applied, the enterprise must sooner or later come to an end without further gifts.

2. Achievement and acknowledgment the necessary conditions.

Further gifts may reasonably be expected on two conditions: (1) When the original endowment has been well employed and more could be used; (2) when it has been employed in a way to commemorate the givers. Active interest in a cause commonly has its private side in a desire for remembrance through it. The trustee of a permanent charitable work, if he is to employ the endowment itself successfully, must so manage the enterprise that men shall be impelled to give to it by both the public and the private motive.

3. Control a condition excluded.

A third condition, that of control by the giver, is incompatible with the nature of a charitable foundation. A trustee that should surrender his judgment to a giver would commit a breach of trust.

Codetermination through restrictions placed upon gifts is not control, even if the restrictions are not what the owner-in-trust would have chosen. For the gift is not accepted unless the advantages of its possession in spite of the restrictions are greater in the independent judgment of the owner-in-trust than the freedom preserved by its rejection. In the event, an owner-in-trust may reverse his judgment; and the case is especially likely in this country, where the ability to acquire wealth has far outstripped the ability to decide wisely upon its use. A gift — whether public or private — which the owner-intrust would rather restore, were it possible, than maintain the conditions it imposes, is not a thing unsuspected among us. The case transforms codetermination into control by the giver. His gift has committed the foundation to a policy which the owner-in-trust condemns. In so far as its acceptance is felt to impeach the judgment of the owner-in-trust, it acts as a deterrent to future givers.

4. Achievement an indirect responsibility of ownership-intrust.

In general the owner-in-trust of a charitable foundation acts through professional executives. The sphere of such aids is confined by the nature of their engagement to the essential purpose of the foundation. Their double duty is to advise how this purpose can best be carried out, and to carry it out in whatever approach to this way the owner-in-trust can approve. Of the two motives, public and private, for the continuation of support to a foundation, the expert agent has the first as his sole sphere. His function is to see, as far as in him lies and he is permitted, that the essential purposes he serves are fulfilled to the best advantage.

5. Acknowledgment a direct responsibility of ownership-intrust.

The private motive, that of remembrance, the expert agent is not called to consider. This source of continued support is the proper care of the owner-in-trust. Every charitable foundation is bound to see that the personalities of givers shall be permanently connected with it in some conspicuous fashion. The property given may be either transformed or used up; employed either for permanent uses or current expenses. If employed for permanent uses, the property, real or movable, into which it has been transformed must bear the name of the giver. If employed for current expenses, the giver's name must be continued in public view by some means not likewise ephemeral. The names of the givers of gifts which have had their day may be inscribed in some place where all concerned in the foundation may find them. For the purpose of the commemoration of the most important temporary aid, a book destined for library shelves, as current statements are destined, does not suffice. A book is needed such as he who runs may read; if an actual book, one of imposing make and installed in a public place. Better than any bound volume is a roster in the form of such stone and metal inscriptions as outlast all memorials save those of the imagination.

6. Capital and endowment economically distinguishable.

A foundation fulfilling these two conditions — with an expert agent capable of serving its essential aims well, and with an owner-in-trust mindful to commemorate givers invariably, worthily, and permanently — is free to devote to its purposes the whole substance given it outright. The expenditure of free endowment is the economic method proper to charitable foundations; that in

which they differ from gainful enterprises. When a firm runs behind annually or an individual lives beyond his income, we know where it will end. Their money was made, and if more be not made, there will sooner or later be none. The money of a charitable foundation was not made, but given; and if spent to good purpose and publicly recalled, more will sooner or later come. To conduct a gainful enterprise with an annual deficit is to invite ruin. To conduct a charitable enterprise with an annual deficit is to invite re-endowment. It is a further dependence on the charity to which the foundation owes its origin. The foundation never would have existed but for the public spirit of the community, and to manage it with no further reliance thereon is a contradiction in act. Instinctive with private owners, the principle that property ought not to be used up does not apply to ownersin-trust. Capital indeed must not be used up, but free endowment may. The expenditure of capital leaves nothing to work with. The expenditure of free endowment provides something to ask for.

7. The wise expenditure of free endowment demands a fusion of the standpoints of owner-in-trust and expert agent.

The free endowment of a foundation should not be spent so fast that its work will be crippled before the ordinary processes by which good work becomes known can be expected to bring more. Its temporary needs may otherwise dominate its permanent interests. Expert opinion may be silenced and business prudence alone vocal. Control by possible givers may be admitted under the spur of poverty. Conversely, free endowment should not be so economized as to stint the good work which is the earnest of more. To these two opposite dangers every charitable foundation is at all times exposed. The advice

of an expert agent, absorbed in pursuing the end to which the foundation is dedicated may invite extravagance; the judgment of an owner-in-trust, absorbed in providing the means by which it subsists may invite parsimony. The choice of the happy middle course is hindered unless the mind of each is open to the considerations that weigh with the other. The ideal owner-in-trust would be his own expert agent. Capital is proverbially and justifiably timid; but endowment should rather take counsel of its hopes, as it would if sustained by an expert's sense of the value and scope of the public purpose to which he has devoted his life.

MUSEUMS AND THE PUBLIC

MUSEUM PUBLICITY 1

When an officer in a museum receives an inquiry about its "House Organ," what is meant is not, as he might be tempted to suppose, a great mechanism of pipes and reeds assumed to overflow a niche in its building, but a printed sheet advertising the institution. Most of the letter-writing and circular-distributing population of this country seems to take it for granted that every House of whatever name must have its Organ; that every concerted human effort must advance to the sound of its own trumpet.

The modicum of truth in this assumption is quite overborne by its factor of error. The modicum of truth is that no enterprise can attain its purpose if those whom it is designed to benefit remain in ignorance of it. The factor of error is the naïve idea that adequate publicity is nowhere possible without the use of modern advertising methods. A Bulletin, or other announcement "To whom it may concern," is always in place: but a House Organ, or other advertising medium crying, "Know all men by these presents," may or may not be in place. The mistake of confusing the two kinds of publicity is the mark of a commercial nation and time; one that has not yet clearly grasped the distinction between public and private purposes, between charity and business. For charity, as we have long known, vaunteth not herself, is not puffed up, doth not behave herself unseemly, seeketh not her own:

¹ Reprinted from the American Magazine of Art, February, 1917.

while in business we find newspaper broadsides vaunting themselves, press agents puffing up their principals, railroad billboards behaving themselves unseemly, and the whole apparatus of advertisement devoted to seeking its own. The distinction lies in the fact that a charity is unselfish in essence, and a business selfish. As is often said, people do not go into business for their health, nor for the health of their neighbors. Charity, on the contrary, aims at the general health. From so deep a distinction in purpose it would appear evident that a correspondingly deep difference in methods must result. On the face of it, a museum, which is a charitable institution, has nothing whatever to do with a House Organ, which is an adjunct of present-day business.

The question remains — What methods of publicity are consonant with a charitable purpose? Evidently such as seek their due share of public attention. Not all the public notice that can, by hook or crook, be won in competition, but such as comports with the public welfare, and the coöperative part therein played by the charity in question. Thus churches post notices for the passer, and offer leaflets to those who enter; and charities of all kinds advertise their needs and opportunities in ways and directions adapted to the particular office they perform. Not the attention it can usurp, but that which it may claim, sets the limit to the methods of publicity to be used by any charity.

Museums are that form of charity whose whole function consists in offering tangible objects to public observation. They are what we call exhibitions, and permanent ones. Observation is an affair of the contemplative, not the active life. The beneficiaries of schools, churches or hospitals must do something, or permit something to be done; the beneficiaries of museums are *visit*-ors, or

see-ers, persons who are held to do nothing but inspect certain permanent objects. But a small part of life can be devoted to purely contemplative ends. During most of our time we must be active otherwise than purely as visitors. The claim of all museums upon public attention is therefore a comparatively small one. They are institutions established in the main for the use of leisure time. The kind of publicity appropriate to museums is confined to measures making known a profitable employment of spare moments. A certain reserve and modesty is in place in whatever methods of publicity are attempted by any museum.

There is an added and fundamental reason for reserve and modesty in publishing the advantages of museums of fine art. Museums are divided into two radically distinct types, the primary purpose of the one being public information, of the other public delectation. To the first type belong museums of science, pure and applied, including history; to the second, museums of fine art. Information and delectation are two very different operations of the human spirit: one calling into play the perceptions and the thoughts only, or what is called the mind: the other the sensibilities and the emotions, or what is called the heart. The mind can be opened at will, but not the heart. A meteoric specimen, General Washington's riding boots, or any other scientific or historical exhibit, could be shown in a street car and interest almost every one; a landscape by Corot might interest almost no one. The active effort to ad-vertise enjoyment, to turn people's hearts to it, will in general be fruitless. It will be the form only and not the fact of advertisement. Every work of fine art proposes that we share in the taste of another person who has shaped it after his own heart; and in order that we should do so, our own hearts must be

ready to take the same mould. Hence no means of compelling the notice of every one will avail to make known works of art. The means must be such as will attract the notice of those more or less disposed thereto in advance. The publicity proper to museums of art is passive and not active; consisting not in advertisements forcing attention, but in notifications rewarding attention. An electric sign over a museum of art would arrest the careless eye, but to small purpose. A notice painted in a public conveyance, hung in a hotel office or shown in a movie series would detain the interested eye and to good purpose.

Some years ago it was argued that a museum should seek popular vogue for its treasures by featuring them in newsy articles for Sunday papers. The enthusiasm which conceived a plan so up-to-date is taking, and the tolerant American is inclined at first to yield to it. Yet the contact of frigid fact acts as a deterrent. The project is ineffective and even condemnable. The reason why is that just given. Fine art is essentially retiring; it is one of the intrinsically unboomable things. Each of its innumerable types and sub-types exists only for those who delight in that variety of it, and thereby betray some germ of like fancies in their own bosoms. Fine art offers something to all of us, but withholds much from every one of us. It must reveal itself, cannot be forced or questioned — as Psyche and Elsa found out — and will reveal itself only unawares even to the sincere and devoted heart. What can be published abroad about it is only the hem of its garment, only the pound where it was once imprisoned. In another phrase, the effort to induce, through the public press, a wholesale appreciation of works of tangible art presents to us the spectacle of that whose essence is perfection imperfectly presented to imperfect apprehension. This is non-sense. The fact that there are enthusiasts among us willing to undertake the task conclusively proves them incompetent for it. It is to believe heaven within our reach and we archangels to grasp it, to think that that which is in reality the bearer of the highest and best experiences of human life can be scattered broadcast through it. The project suggests the late Whitelaw Reid's half-humorous ideal — "the Froudes and Macaulays of the daily press" — which long gave a flavor of mockery to the word "journalism." It suggests Matthew Arnold's phrase for Edwin and his associates -"the young lions of the 'Daily Telegraph.'" For it is as impossible that a newspaper should bring the contents of our museums effectively home to readers generally as it would be that an editor should write of passing events as Froude and Macaulav did of their subject-matter, or that a young lion should storm a walled city. This is the first and fundamental thing to recognize about such a purpose. It is based on untruth, and on untruth nothing can permanently stand.

All museums would like to have crowds of visitors—but only crowds of real visitors, real see-ers of what is before them, gaining something beside boredom from it. Let them all be open to crowds, and let museums of science and history even seek to attract crowds, as by setting up specimen show-windows in business streets, or by organizing visits en masse. Most of such throngs will get much from the exhibits they are marshalled to see. But let not museums of fine art rely on these insistent methods, or deem them effective because they gather crowds. The publicity that brings visitors willy-nilly yields a minimal harvest of real comprehension and a maximal by-product of the familiarity that breeds contempt and dulls vision. For museums of fine art effective

publicity will consist in the widest public offer, verbal and actual, of the opportunity to see beautiful things and of help in seeing them well. Compulsion in any form, as by the trumpeting of a House — or any other — Organ, is as futile for their aims as every effort to lay out a highway to the sky has always been and will always be.

STATE SUPPORT AND FREE ADMISSION

Museums aim at the permanent preservation of their contents. As time goes on these come to consist in increasing measure of survivals from the past. Examples of contemporary art, when acquired for permanent preservation, take their place eventually as examples of the art of a bygone time. In the main, museums are the repository of our artistic inheritance of painting, sculpture, and the minor arts, in so far as this inheritance is not still distributed in public places, in homes or in the shops of dealers.

In such memorials of the life of the imagination all civilized men have a common interest. Ever since the French Revolutionists nationalized the collections of the Ancien Régime, the duty of the public to maintain museums of art has been admitted, and the right of the public to a certain freedom of access to all great permanent collections, whether privately or publicly founded and maintained, has been recognized.

Within recent years questions have been raised regarding both this duty and this right. In our own country museums founded by private initiative have appealed for and obtained a measure of public support. In Europe it has been asked whether the opportunities for free admission to the greater museums have not been made more liberal than is either needful or desirable. The nickname applied to the Louvre "le calorifère national," "the

national radiator," suggests that a desire for physical comfort rather than any interest in the exhibits inspires a good share of its winter visitors. In Germany, the dust and other atmospheric impurities created by holiday crowds in picture galleries, have been signalized as a real threat to the canvases.

As to public support: How far is it desirable that museums of art founded by private initiative should upon due occasion become in a measure a charge upon the public?

It is only within recent years that communities have taken or shared the initiative in the foundation of museums of art. The older museums abroad and at home have originated in private collections either bequeathed to the public or taken possession of in the name of the nation. The purchase of Sir Hans Sloane's collection in 1753 was the nucleus of the British Museum: the Pitti and the Uffizzi collections gathered by the Medici family have now been acquired by the Italian Government. Some great museums, like the Vatican in Rome, still remain private property, while open in a measure free to the public. Some, like our American museums, mostly established during the past half-century, are the property of corporations created for the purpose.

The reason for this historical evolution is plain. The preservation of artistic remains, while appealing strongly to individuals, is a matter which governments can and must postpone to other cares. Museums of art, like government inventories of artistic riches, and like laws against the export of works of art, are the outgrowth of sentiments to which bodies politic are by no means invariably in a position to respond.

The moral of the evolution is equally plain. Individual initiative may to advantage be seconded by collective

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effort in the creation and conduct of museums of art. The best results are to be obtained only by a coöperation between private and public effort. Provisionally, the question just put is to be answered in the affirmative. Museums of art founded by private initiative may to advantage become, upon due occasion, in a measure a charge upon the public.

To secure the cooperation of the public, the cause of artistic salvage to which museums are devoted needs to be presented in ways which will tell upon people in general. The permanent collections established in American cities find no difficulty in obtaining exemption from taxation in return for a measure of free admission. They are classed with our churches as public benefactors. To this extent they are all a charge upon the public. The same argument may and generally does avail to secure positive financial aid. Funds for maintenance have the strongest appeal. A tax for the creation of a public museum promises advantages which the taxpayer may not live to enjoy, and which he may find problematical. In his mind other municipal needs may be more pressing: and he may mistrust the wisdom available for the selection of a site, the choice of building plans, the acquisition of exhibits. The appeal of a going concern, on the contrary, — of exhibits open to his inspection, if not a building already a pride to the city, - is demonstrable and present. Asked to tax himself for the current expenses of an established institution he has the data already at hand for a judgment. The maintenance of the museum during any year inures to his benefit during that year. He is asked to contribute to the preservation and installation of collections which he may visit, show to others, enjoy and profit from. He is asked to help pay the salaries of officers whose expert knowledge he may at any time call

upon, and to help pay for arranging and advertising the work of docents and lecturers from whom he may gain instruction. Of the worth of these things he may assure himself by actual trial. Most American communities value them highly, and are even willing to pay the cost of the buildings needed to make them available. The city of New York has provided liberally toward the buildings of the Metropolitan Museum. The act passed a few years ago by the Legislature of Minnesota authorizes cities to appropriate money for housing as well as exhibiting collections of art owned by private associations. People have ceased to fear that buildings so provided will be a disappointment. The appeal for maintenance remains, nevertheless, the irrefragable one: being a request to pay for value received. The taxpayer may justly be asked to contribute toward the current expenses of an institution already built, already filled, and already open within limits to his free use. In this event the only question before him is as to the amount these privileges are worth.

There is another question before the incorporated museum. With responsibility goes power. If the community served by a museum makes itself responsible through a tax for a necessary share in the maintenance of an institution, it will naturally tend to claim a decisive share in its control. Yet the charter of any incorporated institution vests its control in the corporation alone. For the corporation to admit any outside coercion, even that of the community, would be a breach of the trust imposed by the state from which, directly, or indirectly, it receives its powers. Yet the taxpayers are at any time liable to be tempted to exercise it. There appears but one solution of the difficulty. The tax may be imposed by the power creating the corporation. Its

grant is then in effect a supplement to the charter controlling its use. Its withdrawal to compel a policy unwelcome to the corporation would be in effect a partial abrogation of the charter, a resumption of control once formally made over to certain chosen persons. Such coercion by the state through the threat of withholding support to its own creature is hardly to be anticipated unless under circumstances that would foreshadow the repeal of the charter. Unless a case could be made out for this drastic step, the corporation might be expected to be left free for its allotted duties. The interest of the public in the work of an institution may otherwise be safeguarded by the designation of governmental representatives in the corporation as originally constituted. In the instance of museums of fine art, this provision for governmental members presents a form of that union of public with private effort which experience has shown indispensable to their successful management. A state tax would give the governmental members of the corporation an influence in its councils based on public outlay as well as public advantage. Their wise choice, including doubtless a representation of the community directly concerned, would go far to insure a wise exercise of public control. Assuming a state tax, the question whether museums of fine art founded by private initiative should upon due occasion become in a measure a charge upon the public appears to admit an affirmative answer, not provisional but definitive.

As to free admission. What is the justification, and what are the limits of the right of the public to admission without pay to museums of fine art?

The right rests on deep foundations. Fine art is in its fundamental character a thing totally diverse from money. Works of fine art are indeed goods that can be bought and sold; but the art in them is a good free to all those, and only to those, who are endowed with the capacity, native or acquired, to enjoy it. For a museum of art to sell the right of admission conflicts with the essential nature of its contents.

Good things are of two kinds: the kind that is divided — that is, lessened — when shared, a conspicuous instance being money: and the kind that is multiplied — that is, increased — when shared, a conspicuous instance being the enjoyment of art. Dante in the *Purgatorio* contrasts the two kinds as the earthly and the heavenly form of value, respectively:

"Because your longings are directed thither Where shares are lessened by companionship, 'T is envy moves the bellows of your sighs; But if the love of the celestial sphere Should upward turn your passionate desire, That matter would not occupy your heart. Because the more there are who there say 'Ours' The more each one possesses of delight.

And like a mirror each reflects the other." 1

Mr. Bertrand Russell has lately recalled the distinction. "There are goods in regard to which individual possession is possible, and there are goods in which all can share alike. The food and clothing of one man is not the food and clothing of another: and if the supply is insufficient, what one man has obtained is at the expense of some other man. On the other hand . . . if one man knows a

1 "Perchè s' appuntan lì vostri disiri
Dove per compagnia parte si scema,
Invidia muove il mantaco ai sospiri.
Ma se l' amor della spera suprema
Torcesse in suso il desiderio vostro,
Non vi sarebbe al petto quella tema,
Chè per quanti si dice più lì nostro
Tanto possiede piu di ben ciascuno.

E come specchio l' una all' altro rende."

Purgatorio, xv, 49-56: 75.

science, that does not prevent others from knowing it: on the contrary, it helps them to acquire the knowledge. In such matters . . . any increase anywhere tends to produce an increase everywhere." In like manner money is decreased when shared and the enjoyment of art increased. A fortune shared is, as we say, cut up. But a symphony is not cut up among its audience. Our enjoyment of a play is greater if we have some one to talk it over with, of a joke if we have some one to tell it to. Likewise our enjoyment of a picture or a statue grows by contagion from that of a companion. Of our co-partakers in such goods we can say, "The more the merrier." Money and fine art are like oil and water: differing and even mutually repellent in essence. Art is necessarily joined with its ill-assorted companion in origin and generally in fate. Artists must make a living, and collectors inevitably compete for their achievements. A work of art is rescued from this companionship with money when it reaches a museum. Yet the divorce is not complete while money is demanded as the price of its contemplation. The office of a museum is not ideally fulfilled until access to it is granted without pay. The justification of an entrance fee is wholly practical and temporary. It may be a necessary present means of increasing the revenues of the institution.

Admission without pay does not mean admission without restriction. The ideal management of a museum of art involves limitation of free public access on various evident grounds.

It may be claimed that the dignity of works of art suffers from unlimited freedom of access. We do not value things unless we get them at some cost or other. Entered at will, a treasure house of the imagination may become chiefly a convenience: perhaps a calorifère national. An entrance fee has been proposed for the Louvre, but in addition to its fault of principle, an entrance fee unquestionably bars frequent visits on the part of most people. Yet any fruitful interest in fine art demands repeated contact with it. The reservation of hours or days would safeguard the impressiveness of museum collections without barring frequent visits, and such reservations are called for on other grounds as well.

The safety of collections of fine art imperatively demands some limitation of open time. The contents of museums are very perishable things, subject to injury from dust and heat and light and moisture and vibration. The intention is to keep them indefinitely, and no precaution possible short of wholly shutting them away from view is too great to insure their indefinite survival. It has been remarked that no objects have thus far existed in museum galleries a tithe of the time that many of them have lived. How long Egyptian sculptures, dating from millennia ago, are likely to survive as museum objects no one as yet can tell. The query is one to emphasize, though not as yet to define, the duty of museums to limit the exposure of their collections to crowds.

The closest study of museum objects is impossible when all comers are admitted to the galleries. A museum fails in its duty to artists and archæologists without reserving time for their undisturbed work. Cases must be opened, objects removed to more convenient places, apparatus installed. It is no public loss but an ultimate public gain that the fullest technical and scientific use should be made of museum collections: and for this purpose closed hours or days are essential.

^{1 &}quot;A museum is only a temporary place. There is not one storehouse in the world that has lasted a couple of thousand years. Broadly speaking there is no likelihood that the majority of things now in museums will yet be preserved anything like as long as they have already lasted." Professor Flinders Petrie, Methods and Aims of Archwology, pp. 180–82.

Another need for closed days concerns the private factor in the successful conduct of museums of art. Those individuals who actively contribute to the maintenance and development of museum collections have rights in their inspection comparable to those of the public for whose benefit also these efforts are undertaken. Founders and benefactors, societies of contributors like the *Amis du Louvre* and the subscribers to our American museums may without injustice claim a fraction of time in which they can call their own, collections that are in great measure their own work.

In America there is another need which justifies reserving hours or days for the use of the private supporters of a museum. It is the habit among us to sneer at Society spelled with a capital S. Yet whatever the justification of the satirists from La Bruvère down, a museum of fine art should not join in the sneer. Above all other institutions it should seek to do justice to the kernel of value hidden under the despised yet envied husk. Amiel has spoken of a brilliant social gathering as "an improvised work of art," "une œuvre d'art improvisée." The art it illustrates is the art of manners, the art whose material is our enjoyment of one another's company for its own sake. This is as truly a fine art as architecture or the drama. All civilized men do something toward the adornment of their ordinary behavior, something toward making it agreeable in itself — that is, a work of art. "How are you this morning, Mrs. Blank," said her acquaintance, "not that I care a fig, but it sounds better to ask." There are all grades of attention to manners, from untoward beginnings like this to the finished product that makes the gentleman and the lady, the grand seigneur and the grande dame. Among the artistic standards that a museum may represent, those of manners find indirectly an as-

sured place. Fine art has always been associated with the lives of those who have had exceptional opportunities — however inadequately availed of in many cases - for seeking to make themselves personally agreeable one to another. It has adorned private as well as public affairs, the palaces and gardens of nobles as well as the sanctuaries and forums of the people. Gathered in a museum it does not lose the association. A museum of fine art is a great social engine, in the narrower, and, among us, serio-comic sense of the word society. Its private supporters are drawn mainly from the ranks of those exempt from the cares of livelihood. It may properly lend its influence toward promoting their combined endeavors toward the creation of valid social standards: and this incidental duty warrants granting its private supporters special privileges in the use of its collections. A democracy recognizes no privileges based on blood. It substitutes respect of qualities for respect of persons: in the spirit of Marshal Turenne's reply to a snob, "You who are so fond of ancestors, look at me. I am an ancestor myself." A democracy has no titled class to set standards for the fine art of daily behavior. There is all the more reason that it should conserve and nourish such personal standards as have their root in demonstrated quality. Those persons who wisely and liberally coöperate in the opportunities offered by museums of art for forwarding the life of the imagination among the whole population, demonstrate their quality; and the foundation principle of democracy justifies showing them the regard they have earned by the demonstration. In this legitimate sense of the abused word, our museums are right in allying themselves with Society spelled with the capital S.

All these reservations of time taken together need amount to but a small fraction of museum days. Ideal

management would allow them all. Nevertheless, for most of the time a museum can and should be open free. Experience indicates that a day or two reserved from every seven would suffice for all its private needs. The recognition of public support and immediate public advantage would still be greatly preponderant, as the unequivocally public purpose of all fine art requires it should be.

This appears, for the museum of the present, a satisfactory settlement of the question of free admission. Yet one doubt remains. Is the permanent preservation of more delicate museum objects really possible under gallery conditions — under any conditions, that is, to which the public can be asked to submit? The public use of a room inevitably exposes its contents to a strong light, to changes of temperature and moisture, to dust and polluted air, to vibration, and to a certain risk, though it may be a small risk, of fire and theft. These sources of danger can all be avoided; but to what purpose, if the public is thereby deprived of a sight of the objects?

There is an imaginable way in which this dilemma may perhaps in the far future be solved. Already a drawing can be mechanically reproduced with such perfection that the paper on which it is printed alone distinguishes it, even to a careful eye, from the original. Manifolding processes, now among the wonders of modern invention, are doubtless not at the end of their development. What if invention in future should provide means for reproducing pictures, statues, and objects of minor art as exactly as drawings nowadays? The public interest would then not be served, but disserved by exhibiting the originals publicly. They would better be preserved apart as data for inquiry and as bases from time to time, of reproduction. Museums of this far future would consist of galleries

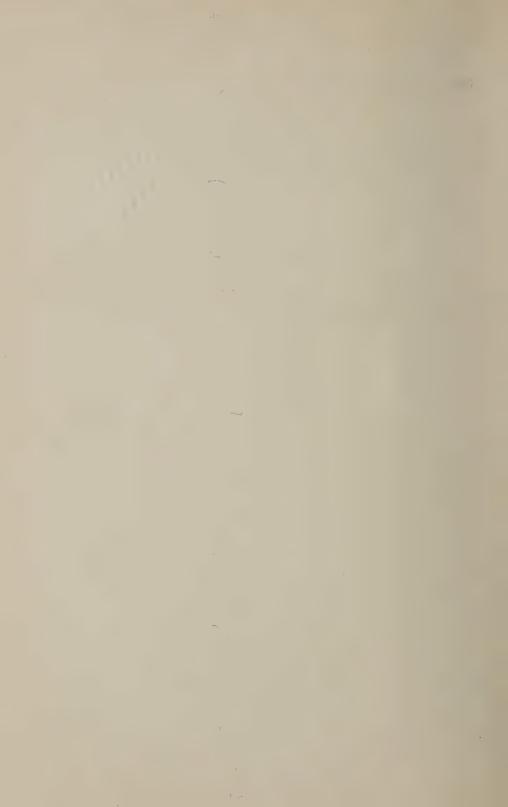
containing reproductions and vaults containing originals. These would be kept under constant and safe conditions, like our standards of weight and measure, and like them, would become subjects of study and sources from which to obtain representatives for public use. We should all then be brought up on reproductions; but the word would have lost its flavor of vulgarity. The problem of the indefinite preservation of fragile artistic remains would have been solved as far as human foresight could solve it, without interference with the right of every one to see them as they should be seen.

The seven ideals of this book hold for these dreammuseums, as for our real ones. Even the practical recommendations here derived from the ideals would in but one instance become obsolete. There would be no need of new forms of show-case, for there would be no need of show-cases at all. The objects shown would all stand free in the galleries. It might even be possible to permit the handling indispensable in some instances for the full comprehension of an artist's achievement. Lorenzo Ghiberti confessed that only the sense of touch revealed the last perfections of certain antique sculpture. If the contents of the public museums of the future were all cheaply and easily reproducible, the loss and damage resulting from their open installation would be as nothing compared with the enhanced interest and comprehensibility of the exhibits.

But though the problem of the least exacting form of show-case would have become a dead issue, the behavior of the human mind and muscles under fatigue would not have changed nor would the behavior of the retina under glare have changed. The new inventions would not have changed the nature of fine art as an opportunity of culture. The need of an interpretation of museum contents would have grown as the lapse of time made more of them antiques. The capacity of the expert would have increased with the increase of knowledge, and have strengthened his claim to a share in museum management. In discussing all these seven ideals, in separating what is valuable from what is negligible in them, in supplying their deficiencies, we can feel that we are building for an indefinite future.

APPENDIX

- A. AIMS AND PRINCIPLES OF THE CONSTRUCTION AND MANAGEMENT OF MUSEUMS OF FINE ART: A SYLLABUS
- B. MUSEUM REGISTRY OF PUBLIC ART
- C. OBSERVATIONS IN EUROPEAN MUSEUMS



APPENDIX

A

AIMS AND PRINCIPLES OF THE CONSTRUCTION AND MANAGEMENT OF MUSEUMS OF FINE ART: A SYLLABUS ¹

BENJAMIN IVES GILMAN AND MATTHEW STEWART PRICHARD²

AIMS

By a museum of fine art is here understood any permanent exhibition restricted to objects possessing artistic quality. By artistic quality is understood the worth a man may give his work for contemplation apart from use.³

By the appreciation of fine art is understood the perception of artistic quality. To appreciate a work of art is to see it with the eyes of its maker when he looked upon it and found it good. In appreciation a beholder receives into his own spirit the secret treasure of another's heart, gathered by an observant eye,

¹ Reprinted from the Museums Journal for July, 1909.

² This essay expresses opinions reached in the service of the Museum of Fine Arts, Boston, and formulated during the preparation of plans for the present building of the museum. The paper was read at the first meeting of the American Association of Museums in New York, May 15, 1906. It had been prepared during the previous winter with the aid of Mr. Matthew Stewart Prichard, then a colleague, now a prisoner of war at Ruhleben, Germany. The section on aims restates briefly the æsthetic ideal of art museum management advanced by Mr. Gilman in two letters to the Boston Evening Transcript of October 12 and 28. 1899, and argued at length in the essay on "The Distinctive Purpose of Museums of Art," first published in the Museums Journal for January, 1904, and reprinted above. Among the Principles those of Dual Arrangement, Harmony, and Reality were stated by Mr. Prichard in his essay on "Current Theories, etc.," privately printed in "Communications to the Trustees regarding the new building" (I. March, 1904). The principle of Dual Arrangement applies to museums of art the division of collections into a series for exhibition and a series for study now common in museums of science. Of the remaining four principles, two, those of Quality and Service, are based on previous practice of the Museum in Boston, and two, those of Simplicity and Segregation, state conclusions embodied in its present building.

³ The artistic motive, as the desire to create (to call into being) differs from the practical motive, the desire to employ (to call into action). Creation directly affects only the thing created, employment directly affects other things than that employed. The two impulses, artistic and practical, reach fruition together when intrinsic value is given to an instrument of valuable results.

wrought by a fertile fancy and conveyed by a cunning hand.¹
Artistic production is imaginative utterance; appreciation its

understanding.

Unless understood, an utterance misses its purpose, whether of pleasure or profit. Understanding is therefore the normal mental attitude toward utterance. But another attitude of mind is possible. We may seek to know not the utterance itself, but other things in relation to it. To appreciation as knowledge of art corresponds investigation as knowledge about it.

Hence, any permanent repository of works of fine art has a double function: a primary one, that of securing appreciation for its contents; and a secondary one, that of conducting or at least permitting the investigation of them. Those who approach a work of art seeking to know the aim of the artist are first to be considered in the administration of a museum; those seeking to further their own scientific or technical aims in the examination of a work are to be offered every facility compatible with its paramount right, as speech, to a hearing.

PRINCIPLES

I. SIMPLICITY

A museum building should be simple in design, externally and internally.

For a building elaborate in effect competes with the collections for the attention of the visitor and detracts from those of a different spirit from its own. Further, a monumental design complicates the problem of lighting by restricting freedom of fenestration.²

¹ Albrecht Duerer. "Daraus wirdet der versammlet heimlich Schatz des Herzen offenbar durch das Werk und die neue Creatur die einer in seinem Herzen schoepft in der Gestalt eines Dings." (In artistic production "the secret treasure of the heart gathered (by observation) is made manifest through the work and the new creation which a man shapes in his heart in the form of a thing." "On Human Proportion," Excursus at end of book III, Lange and Fuhse. Duerer's Schriftlicher Nachlass (Halle, 1893), p. 277.

² Light from the sky. In order that the lighting of a room shall be adequate for museum purposes, it is necessary that an ample area of sky shall be visible from its windows. For the light reflected from buildings or other objects is much more strongly colored than light from the sky, and may be regarded

as an adulteration to be minimized.

Dr. A. B. Meyer, formerly Director of the Royal Zoölogical, Anthropological and Ethnographical Museum, Dresden. Studies of Museums, reprinted in translation in the Report of the United States National Museum (1903), p. 389.

The architectural effect of many museum buildings has been obtained at the expense of the works of art they were built to show. All writers on museum topics deprecate this unnecessary sacrifice to rich and imposing façades, domes, stairways, corridors and anterooms and to the exuberant decoration of galleries, agreeing that a museum building should constitute an unobtrusive frame to the picture presented by the collections, and that as such it ought to be made to yield a specific architectural type, with its own distinctive if more modest beauty.¹

II. SEGREGATION

A museum building designed for large and varied collections should be divided into sections not directly connected, each section to contain no more galleries than can be seen at one visit without undue fatigue; and agreeable resting-places should be introduced between the sections.

For: first, galleries should not be thoroughfares. Those who traverse exhibition rooms with the sole aim of getting elsewhere both weary themselves and disturb others. A museum should be so arranged that only those who have some interest in a given section will have occasion to enter it.²

¹ Dr. G. E. Pazaurek, Director of the Landes-Gewerbe Museum, Stuttgart. "Museumsbauten," Wiener Bauindustrie Zeitung, vol. xv (1903), p. 343.

Dr. Adolf Furtwängler, late professor at the University of Munich and Director of the Glyptothek. *Ueber Kunstsammlungen in alter und neuer Zeit* (München, 1899), p. 25.

John Ruskin, letter to the London Times, of December 29, 1852, on the Na-

tional Gallery.

Sir J. C. Robinson, late Superintendent of the Art Collections of the South

Kensington Museum, Nineteenth Century (1892), p. 1025.

Dr. Ernst Grosse, professor at the University of Freiburg, and Director of the Freiburg Museum. "Every gallery is nothing more nor less than a great frame for the art works it contains, and like a good frame it should draw no attention at all to itself, either by a too scanty or a too rich decoration." Report of the

Mannheim Conference of Museum Officials (Berlin, 1903), p. 125.

² The germ of this arrangement is found in the old Pinakothek at Munich (1836), where pictures of the same school are placed in one section consisting of a top-lighted gallery for the large pictures and side-lighted cabinets for the smaller. The architect, Baron von Klenze, is quoted as saying, "I wish to allow the possibility of arriving at any particular school without going through another, and for this purpose I have a corridor running the whole length of the building, which communicates with each separate room."

Edward Edwards, formerly of the British Museum, Administrative Economy

of the Fine Arts (London, 1840), p. 269.

Professor W. Stanley Jevons, late professor at University College, London, Methods of Social Reform, p. 59.

Second, small collections are more rewarding to the visitor than large ones. A greater unity of impression is possible with fewer exhibits and the attention is fresher for them.¹

Third, museum visiting is one of the most fatiguing of occupations. To see a work of art thoroughly is not only an effort of the eyes but in general of the body, in standing, bending, or other muscular tension; to understand it taxes memory and intelligence alike. In proportion as appreciation is more com-

plete, the need of occasional relaxation increases.

The objection that by a system of intermediate vestibules or corridors the distances to be traversed in the museum as a whole are increased, is not valid. Museum fatigue may be said to come solely from standing and looking: the actual walking is rather a relief. The objection that seats in the galleries suffice for rest, overlooks the fact that, although indispensable, they do not afford the mental freedom and diversion necessary to keep the mind of the visitor freshly receptive.

A museum should, if possible, be situated in grounds laid out for use as a park; not only to give opportunity for extension and to obtain protection from noise, dust, and risk of fire, but also on account of the power of natural beauty to draw visitors and put the mind in tune for beautiful works of art; and, further, in order to permit the free use of gardens and courts by visitors in moderate weather as an extension of the facilities for pleasant relaxation afforded in the building.²

Dr. F. A. Bather, Assistant Keeper, Department of Geology, British Museum, Presidential Address, *Museums Journal* (1903), p. 79.

Dr. Alfred Lichtwark, Director of the Kunsthalle, Hamburg, Report of Mann-

heim Conference of Museum Officials (Berlin, 1903), p. 119.

 1 Dr. G. Pauli, Director of the Kunsthalle, Bremen, Museumskunde, vol. ${\bf r}$ (1905), 3, p. 149.

² Dr. J. Leisching, Director of the Imperial Austrian Museum of Art and

Industry, Vienna, Report of the Mannheim Conference (1903), p. 134.

Dr. J. H. von Hefner-Alteneck, first Director of the Bavarian National Museum, Munich, caused the open space behind the museum to be laid out as a garden and used for the installation of objects (decorative statues, grave monuments) originally intended for out of doors. "Thousands of visitors have expressed their grateful thanks that, apart from the pleasure of seeing these monuments, they were able in the summer months to recuperate here under the open sky or in shady bowers from the fatigue of looking about within the museum." Entstehung, Zweck und Einrichtung des Bayerischen National Museums in Muenchen (1890), p. 2.

At Avignon "the pictures are arranged in a charming way in great apartments opening upon a solitary garden where there are large trees. There reigns in this place a profound tranquillity that recalls the beautiful churches of Italy; the spirit, already half detached from the vain interests of the world, is in a mood to appreciate the loftiest beauty.... I passed two delightful hours dream-

III. DUAL ARRANGEMENT

Each section of a museum building should contain two groups of galleries; one for the exhibition of selected objects in a way to promote their appreciation, the other for the installation of remaining objects in a way to facilitate their investigation. The contents of the exhibition galleries should be varied as opportunity offers. The reserve galleries should be connected with an office, a class-room, a work-room, and a special library, and should be open to any one wishing to enter.

All large collections of prints, coins, and textile fabrics are administered as a store of possessions freely accessible and drawn upon for public exhibition. The extension of this principle to collections of all kinds promises five advantages:

- (1) By closely installing much of its contents a museum may add to them without correspondingly enlarging its building. The principle contributes to solve the pressing problem of the growth of museums.
- (2) A museum provided with reserve galleries is free to acquire any object worthy of permanent preservation, whether suitable for continuous public exhibition or not. The reserve galleries may offer accommodation for objects of unmanageable size, whether great or small, objects of scientific or technical interest chiefly, objects painful or repugnant in motive, and those whose liability to injury from dust, light, change of humidity or temperature, mechanical strain or shock, demands their exhibition under special restrictions or infrequently.
- (3) In the main galleries the public is offered a rewarding exhibit in place of the more or less wearisome mass of objects commonly shown in museums.
- (4) In the secondary galleries, the conditions of space, freedom, light, guidance, apparatus, and companionship are such as most favor the purposes of scientific and technical students.
- (5) The interest of the community in the museum is maintained by changes in its exhibition galleries.¹

ing in this museum. How different from that at Lyons!" Stendhal (Henri Beyle), Mémoires d'un Touriste, vol. 1, p. 206.

Professor A. R. Wallace, "Museums for the People," Macmillan's Magazine,

vol. xix (1888-89), p. 249.

¹ Professor Louis Agassiz embodied the idea of public and reserve collections in his plan for the Museum of Comparative Zoölogy at Harvard in 1860. *Third Annual Report of the Museum of Comparative Zoölogy* (Cambridge, U.S.A., Octo-

The following negative definitions of the principle of Dual Arrangement may serve to prevent misunderstanding:

(1) The principle does not propose to choose for exhibition all objects above a certain quality and leave in reserve all objects below that quality. This would result in an installation permanent as long as the museum standards were unchanged, instead of the varying exhibitions advocated. Doubtless in most collections more or fewer objects would demand to be shown in the exhibition galleries all the time, and these would chiefly be among the finer; and more or fewer could never be wisely removed from the reserve galleries at all, and these would chiefly be among the inferior. In so far the general level of the

ber, 1861), p. 10. See also *Bibl. Univ. et Revue Suisse* (47^{me} Année nouv. per.) vol. XIV (1862), pp. 527-40: referred to in Dr. A. B. Mayer's *Studies of Museums*, p. 325.

Dr. Karl Moebius, late Professor of Zoölogy in the University of Berlin and Managing Director of the Royal Museum of Natural History, Berlin, "The Proper Arrangement of Great Museums," *Deutsche Rundschau* (1891), vol. 68,

p. 352 ff.

Dr. G. Brown Goode, late Assistant Secretary of the United States National Museum, Washington, "Principles of Museum Administration," 5.B. The Study Series; C. The Exhibition Series. United States National Museum, Report (1897), vol. 11, p. 219.

Sir W. H. Flower, late Director of the British Museum of Natural History,

London, Essays on Museums (London, 1898), p. 21.

Professor Patrick Geddes, Professor of Botany, University College, Dundee: President of Edinburgh School of Sociology, A Study in City Development, p. 164.

L. Alma Tadema, R.A., Le Musée, vol. I, p. 66.

The Museums Journal, note on the Museum of Decorative Art, opened 1905 in the Pavilion de Marsan of the Tuileries, Paris (January, 1906), p. 245.

Revue Archéologique, Septembre-Octobre, 1905, Correspondence, p. 318.

New York Life, "Everybody knows that a large proportion of the contents of most of our art museums, even the very best of them, are a profound bore to the average intelligent visitor, who seeks to refresh his soul for a little while by the contemplation of these beautiful works." (January 11, 1906, p. 54.)

Rev. J. G. Wood, naturalist and author, "The Dulness of Museums," Nine-

teenth Century, vol. XXI (1887), p. 394.

Changes of Exhibition.

Handbook to the Ruskin Museum, Sheffield, England (1900), p. xi.

Li Chih, a Chinese writer of the 11th-12th century, author of the Hua p'in. "No more than three or four pictures by eminent artists should ever be hung in one room. After these have been enjoyed for four or five days, others should be substituted." Quoted by Herbert A. Giles in his *History of Chinese Pictorial Art*, p. 134.

Lionel Gast, editorial note, *Burlington Magazine*, no. 91, October, 1910, "One may even foresee a distant future when museums possessing almost all the great masterpieces of the past will never display all their treasures at once, but will bring them out a few at a time, giving to each its ideally perfect setting, and so

avoid the dulled edge of familiarity."

exhibits would be raised and this would be of advantage to the public taste.¹

(2) The controlling purpose of selection would in all cases be to exhibit together such works as would promote or at least not interfere with each other's appreciation by the public. This is not a decorative purpose aiming at the effectiveness of the galleries, but an artistic purpose, aiming at the effectiveness of the individual works displayed. As hereafter stated under the principle of Harmony, this artistic aim would in general be best attained by an ethnological and historical choice and grouping of objects.

The aim to arrange scientifically and technically instructive exhibitions, while secondary, should be fulfilled to the utmost limit compatible with bringing out for the visitor the effect intended in each work by the artist.²

(3) The principle does not propose to exclude either the public from the reserve galleries or scientific and technical students from the exhibition galleries, but to provide for each a place where their peculiar needs, on the one hand of appreciation, on the other of abstract inquiry and practical training, can be more perfectly met than in galleries where both are served together. It aims not to do less but greater justice, both to the art of the past, by providing for its more perfect assimilation by the whole present public, and to science and to the art of the future, by enabling each in its own way to draw more profit from the treasures in museums.

IV. QUALITY

In adding to its collections the primary aim of a museum of fine art should be the acquisition of works whose artistic quality meets the test of responsible criticism; a secondary aim, the

¹ Matthew Arnold speaks of "inferior work . . . imbedding the first-rate work and clogging it, obstructing our approach to it, chilling, not infrequently, the high-wrought mood with which we leave it." Preface to his anthology of Wordsworth's Poems. (London, 1879.)

² Professor Charles Eliot Norton, of Harvard University, has noted that scientific attainment rather than artistic insight is too frequently the aim of study in museums: "... the risk of study in a museum is that instead of leading to the perception of beauty, the highest object it can have, it is too generally directed to merely scientific ends, that is, to the attainment of knowledge about the object, instead of to the perception and appreciation of that which makes the object in itself precious or interesting." Letter to the New England History Teacher's Association, October, 1904.

formation of comprehensive exhibits. Every museum owes a special duty to local artists.

Museums and the promotion of art. Consciously or unconsciously an artist adapts his creation to a definite environment. In offering another, museums aim at the security and publicity of the work. They are repositories of works of art either separated from their native surroundings or lost to the world therein. Their twofold office in the economy of artistic culture is to preserve the art of the past alike from destruction and from oblivion.

To inspire and direct artistic production is not the province of museums but that of life itself. Museums hold up the mirror of the past to the art of the present, as libraries do to its literature.

*Critical ability.** Connoisseurship in its highest form implies

¹ Museums and Living Art. Dr. Adolf Furtwängler, Kunstsammlungen aus alter und neuer Zeit (1899), p. 29.

Dr. George Santayana, Professor of Philosophy, Harvard University, The

Life of Reason; Reason in Art (1905), p. 209.

Museums and Art Industry. Dr. Wilhelm Bode, General Director of the Royal Museums, Berlin, writes of "the expectation of a new development of craftsmanship upon the basis of antique models shared by us all about twenty-five or thirty years ago," and concludes that "the essential condition of a permanent improvement in art industry and of its necessary support is the elevation of public taste." "This is one of the most important functions not only of museums of art industry but of museums of art: for so long as the public looks at works of art only on the practical and not on the artistic side, all progress in museums and schools of art is of little worth." "Functions of Museums of Art Industry," Pan (1896), p. 124.

Dr. Justus Brinckmann, Director of the Kunstgewerbe Museum, Hamburg. "In so far as the exhibits offered to craftsmen by the museums (of art industry) were welcome and exploited as a convenient means of throwing on the market a succession of novelties, they perhaps often contributed to destroy artistic inventiveness and invite to a superficial eclecticism." Guide to the Hamburg

Museum of Art Industry (1894), p. v.

René Jean writes as follows of the Museum of Decorative Art in the Tuileries (Pavilion de Marsan): "People have objected that the museum aims at the education of the people rather than that of the artisan: but what does this criticism amount to? The workman does not control the fashion, but submits to it. To cultivate the taste of the buyer cultivates that of the producer." Le Musée, vol. II, no. IV, pp. 195-96. See also the account of this museum with

illustrations by Gaston Migeon, Gazette des Beaux Arts, July, 1905.

See also Gustave Larroumet, late perpetual secretary of the Academy of Fine Arts, Paris, and Professor at the University of Paris, in the Annales Politiques et Littéraires, March 29, 1903: H. De Regnier, in the same journal, August 16, 1903; R. de la Sizeranne, Revue des Deux Mondes (1899), p. 114 f; G. Elpi, writer, Italy, I Musei (Florence, 1902); Hans Dedekam, Director of the Nordenfjeldske Kunstindustrimuseum, Trondhjem, Norway. Norway, Museumskunde, vol. 1, p. 78; Sir W. M. Conway, former Slade Professor of Fine Arts, Cambridge, England, The Domain of Art, p. 24.

an endowment and training capable of judging a work of art upon both internal and external evidence, both visually and by documents, both technically and scientifically, from the point of view of both maker and beholder, craftsman and historian.¹

Comprehensive collecting a secondary aim. Comprehensive collections are better for scientific instruction; choice collections are better in themselves. The aim of comprehensive collecting is incompatible both with the purpose to collect works of the first quality and the purpose to show them in the best way. For the ideal of completeness is impossible of realization without the acquisition of secondary material and generally of reproductions; and from a little of every style the content of no one can be adequately gathered.

The necessary incompleteness of any museum of the first order is evident, but not to be regretted.²

The duty of museums to local art. The office of preserving good work from being forgotten is one which each museum can best perform for its own neighborhood. In the case of genii loci a museum has a duty not only to preserve but in a measure to make their reputations. It may consider itself not only the guardian but the advocate of indigenous art.³

V. HARMONY

In the main galleries of a museum those objects should be installed together which best aid each other's appreciation. For this purpose, the arrangement of objects according to the peoples, times, and schools that have produced them is preferable to their classification by the arts they represent.

For products of the same civilization efficiently aid each other's appreciation by uniting to evoke the spirit which engendered them. The installation together of objects of the same art, or in the same materials, from different civilizations, while it may facilitate scientific and technical study does not contribute to their appreciation.⁴

¹ Bernard Berenson, Florence, Italy, "The Study of Italian Art" (1902), Rudiments of Connoisseurship, p. 111 ff.

² Dr. Ernst Grosse. "For a museum such as we have in mind there is no more foolish extravagance than 'inexpensive' acquisitions of poor work with good names. Such we may gladly leave to those directors and amateurs whose highest ideal consists in 'completing their collections.'" Aufgabe und Einrichtung einer Städtischen Kunstsammlung, p. 6.

³ A. Foulon De Vaulx, "Dans un Musée de Province," Le Carnet (July, 1902), p. 55. Dr. Alfred Lichtwark, "The Immediate Duty," Museumskunde, vol 1, 1. (1905.)

⁴ Dr. Justus Brinckmann. Guide to the Hamburg Museum of Art History (1894),

VI. REALITY

Reproductions should not be exhibited with originals.

The grounds for this rule are, first, the radical inferiority of most copies; second, the right of the public to trust in what it sees without the vexing question, "Is this real or imitation?" third, the right of originals to exemption from this doubt, and from the companionship of radically inferior objects.

Reproductions of works of art. The derivative character of reproductions should be clearly expressed by installing them in separate collections, which should be freely accessible.²

Reproductions of environment. To install real works of art upon a reproduced background even if the latter is plainly a reproduction, both confuses the public and dishonors the work of art. A museum should remain frankly a museum, and never approximate a theatre, however its decoration be harmonized with its contents.³

p. vi. W. Stanley Jevons. Methods of Social Reform, p. 57. The Crown Prince and Crown Princess Frederic of Germany, Jahrbuch der Königlichen Preussischen Kunstsammlungen, vol. IV (1883), p. 121. Lieut.-Colonel G. T. Plunkett, C.B., Director of the Dublin Museum of Science and Art, Ireland, "How an Art Museum should be organised," Magazine of Art, vol. 27, p. 448.

Compare also the opinions on museum installation expressed by Frantz Jourdain, Paul Adam, Maxime Maufra, Edmond Frank, H. Marechal, and Henri

Martin, in Le Musée for January, 1907.

¹ Dr. George Santayana. "The Known Impossibility of Adequate Transla-

tion," The Sense of Beauty, p. 171.

Professor A. Lichtwark: "From plaster casts and photographs I anticipate not much good and great disadvantages. Their number and their deficiencies mislead one into superficial contemplation. It is a sorry sight to see a class of girls or gymnasiasts before an exhibition of photographs of the masterpieces of Michael Angelo and of Raphael.

"The flood of reproductions threatens to drown out the seeds of artistic culture as soon as they show themselves. Whoever, after considerable previous study, arrives in Italy will recognise that he is everywhere inclined to overestimate the works of art that he does not know in reproduction, and that it is hard for him to get a fresh and new impression of the great masterpieces through the chaos of reproductions of which his head is full." Uebungen in der Betrachtung von Kunstwerken (Dresden, 1900), p. 33. Théophile Gautier has made a like observation, Voyage en Italie, p. 204.

² "It goes without saying that it is absolutely essential to avoid mingling (as is still done in many museums) originals and copies, antique marbles and casts. Such a confusion cannot but mislead uninstructed visitors, and blunt the sense of beauty, through putting lifeless copies on a plane with original works." L. Réau, "L'organization des Musées," Revue de Synthèse Historique (1909), p. 19.

³ J. Guadet, professor at the Ecole des Beaux Arts, Paris, *Éléments et Théorie* de l'Architecture, pp. 312 ff. Edmond Haraucourt, Director of the Cluny Museum, Paris. Le Musée, vol. 11, p. 73. Dr. J. Lessing, late Director of the Royal

VII. SERVICE

A museum of fine art should be active in exhibition as well as in acquisition; seeking primarily to promote public appreciation of its collections by attracting and instructing visitors; and secondarily, to increase and diffuse scientific and technical knowledge of them through research and by aid to students.

The life of a museum consists not only in growth but also and chiefly in influence. The Thorwaldsen Museum, which does not grow at all, is, nevertheless, a permanent vital force in European civilization. That the possessions of a museum should increase is desirable; that they should win new friends is essential.¹

To these ends the museum should command the services of men competent not only to effect the proper preservation and advantageous exhibition of the collections and to give wise advice regarding accessions, but to aid both in their appreciation and in their investigation.

Service to visitors. The public whose welfare is served by a museum should be attracted to visit it by the charm of the building and its surroundings, by liberal conditions of admission, by arrangements for comfort and convenience; they should be interested in the collections by their advantageous installation, their sympathetic interpretation and the opportunity to aid in spreading their influence. Concerts, indoors in winter and outdoors in summer, offer a means of attracting visitors and occupying intervals devoted to rest.

In particular a museum of art should, as far as is practicable, be opened free to the public daily during daylight hours. Among

Kunstgewerbe Museum, Berlin: "Now-a-days, the demand is often made that not only a general conception of a certain epoch of culture shall be given, but that things shall be installed to look exactly as they used to. Gentlemen, this will not do. Under certain conditions, it is possible: in provincial collections, for example, when a whole interior is shown: but even then one wall must be left out in order to look in, for visitors can hardly actually enter. But for large museums, nothing remains but to adhere in a general way to motives of a certain epoch. In this respect much may be done." Report of the Mannheim Conference of Museum Officials, p. 109. Joseph Folnesicz, Kustos at the Kunstgewerbe Museum, Vienna, Kunst und Kunsthandwerk, vol. vi (1903), pp. 57 ff.

¹ The Mannheim Conference of Museum Officials (September, 1903), the first congress of continental museum officials yet held, was called to consider the question: "How shall the influence of museums upon the people generally be increased?"

Charles H. Caffin, "Museums and their Possibilities of Greater Public Usefulness," *International Studio*, "American Studio Talk" (October, 1903), p. clxiii.

desirable accommodations may be mentioned cloak and retiring rooms, convenient and ample for exceptional crowds; a public telephone, an information agency, and a restaurant; handbooks guiding the visitor through the collections, and catalogues, photographs and other reproductions describing and illustrating them; a bulletin chronicling the history of the institution and its possessions; printed information about the exhibits in all the galleries; oral information by lectures on the collections and guidance through them; committees and societies for purposes bearing upon the collections, including the foundation of branch exhibitions, to be formed under the auspices of the museum, and working from it as a centre.

The public service of a museum of fine arts need not be limited to its own collections. A chartered guardian of fine art may fitly lead in efforts to preserve whatever artistic resources its neighborhood possesses, undertaking to register, study, and make known any local treasures of art which their public or private possessors offer for the purpose; recording them by description and photography, gathering and interpreting data about them and arranging for public access to them. In accepting this wider duty a museum would usurp no control over local art, past or present, but would remain within its proper sphere as a conservative force, sheltering certain works of art within its walls and imparting information as to others without.

Service to students. A work of fine art like any other product of man's creative skill is a datum both for science and for the arts concerned in its production. It constitutes a fact of which men of science should take due cognizance in their efforts to add to knowledge. It constitutes, further and therefore, a pedagogic means of which teachers of related subjects should make use for the advantage of their pupils. Again, as an example of a certain branch of human skill, the practitioners of that art should make use of it in the development of their own and others' creative abilities. A museum should facilitate the use of its collections for all these aims. In particular, a museum may offer the services of its officers and the use of its galleries and department rooms for scientific and technical lectures upon its collections, and accord free admission and other special privileges to teachers and students.

¹ Professor A. Furtwängler, Kunstsammlungen aus alter und neuer Zeit, p. 27. The discussion of this question with reports from those who have acted as guides in the museums of Frankfort, Munich and Berlin, occupies pp. 146–84 in the Report of the Mannheim Conference of Museum Officials.

The foregoing seven principles may be summarized as follows:

Museum buildings should be marked by their quiet design (I), and should consist of units of moderate size (II), each containing primary and secondary galleries (III). The collections should aim at excellence rather than comprehensiveness (IV), and should be arranged by peoples and epochs instead of arts (V), reproductions being shown separately (VI). The museum should be active in attracting visitors, in interpreting objects exhibited, and in aiding scientific and technical students (VII).

¹ On the various subjects of this paper compare also:

F. A. Bather, "The Functions of Museums: a Resurvey," *Popular Science Monthly* (January, 1904), pp. 210–18.

R. L. Hartt, "Art Galleries for the Plain Man," World's Work, November,

1907.

F. W. Coburn, "The New Museum of Fine Arts" (Boston), New England Magazine, January, 1908.

Burlington Magazine, London, editorial articles: "Museums" (September 15, 1908); "Reorganization at South Kensington, I" (December 10, 1908).

Dr. Theodor Volbehr, Director of the Kaiser Friedrich Museum in Magdeburg, "Die Ausstellungspflichten unserer Museen," *Die Woche*, no. 50 (12 December, 1908), p. 2149.

L. F. Day, "How to make the most of a Museum," Journal of the Society of

Arts, vol. 56 (January 10, 1908), no. 2377.

MUSEUM REGISTRY OF PUBLIC ART

I. MUSEUMS OF ART AND THE CONSERVATION OF MONUMENTS $^{\scriptscriptstyle 1}$

REGISTRY, STUDY, PUBLICITY

Conservation is an essential function of museums. By the dictionary a museum is a building devoted to the collection, preservation, and exhibition of works of nature or art; and in common usage the persons in charge are called curators or caretakers.

The need of concerted effort to care for instructive and beautiful objects outside museums has been felt and met only within the past century. Beginning with the French law of 1792, relating to the destruction or removal of historic or artistic treasures, the movement is now represented by a large body of similar measures in many countries; by territorial inventories—those of the German and other governments; by associations local and general—among others the Heimathschutz unions now multiplying in Germany, the National Trust in England, the Scenic and Historic Preservation Society in this country; and by national boards—among others the Italian Uffizi regionali per la Conservazione dei Monumenti, the French Commission des Monuments Historiques (1837), and the departmental commissions established in France under the law of April 24, 1906.

The purpose of the present essay is to recommend to museums in America an extension of function carrying with it the leadership of such a movement in this country. The new office proposed to them is that of public information regarding outside objects germane to their purposes. Its possible scope includes all neighboring objects of public interest, whether instructive or beautiful, natural or artificial. The argument is here addressed directly to museums of art, but offered also, mutatis mutandis, for the consideration of museums of natural science. Doubt-

¹ Reprinted from the *Proceedings of the American Association of Museums* (1909), vol. III. Also published in the *Bulletin of the Museum of Fine Arts* (Boston, February, 1910), vol. VIII, no. 43.

less museums of history also might usefully supplement the efforts now making here and there throughout the country to preserve our memorials of antiquity. Let American museums of art no longer confine their interest within their own walls. Let each take its neighborhood for its province, acquiring and imparting information about any local works of art, public or private, whose owners may offer them for the purpose. A knowledge of what we have is the necessary and often sufficient condition of its preservation; and museums may thus indirectly make the circle of their conservative activity complete.

Aside from certain conspicuous instances, the Hancock House in Boston, the L'Enfant plan of Washington and others, there has as yet been comparatively little occasion in America for efforts to protect our artistic inheritance. The occasion will surely come. Let it find the art museums of the country organized in defence of its artistic monuments. Let the museum of each locality become a rallying point for such a movement. Where no museums yet exist, let them be founded for this purpose only, until a building be needed as a new anchorage for such of their outside charges as are set adrift, or for other objects like them. Whatever a museum may accomplish in gathering and spreading information about the monuments of the region will be so much gained. Were the data all held in the drawer of a desk, time might make them priceless memorials.

Such a registry of local art may properly, easily, and advantageously be carried on by museums of art. Properly, because it is a work implying no responsibility beyond that of acquiring and giving information; and the information of the public on matters of fine art lies within the charter purposes of every museum. Easily, because every museum has already at its disposition for its own purposes an apparatus of registration, and a more or less numerous staff of persons competent to use it. Advantageously, because the conservation of monuments is a work of eternal vigilance better intrusted to the initiative of a permanent institution than to voluntary societies.

In a word, the present proposal makes the whole duty of museums of fine art one of watch and ward, and not ward alone as hitherto. Continuing guardian of its own treasures only, the museum would be brought into relation as visitor with everything of like kind about it. More specifically the museum would undertake to prepare and maintain an inventory of works of art outside its walls which are interesting and accessible to its public, and to promote the enjoyable and profitable study of them by all.

In pursuance of this purpose, the museum would schedule, investigate, and popularize any specimens of fine art in its neighborhood which the owners might offer and the museum think worthy. So registered, they would be certified as public exhibits, or as available for public exhibition under conditions agreed on between the owner and the museum, the owner retaining entire control and the museum accepting no responsibility.

In detail the three duties of visitation would be the following:

(1) The accurate and complete registry, by description, measurement, photography, and otherwise, of such buildings, sculptures, paintings, etc., in the locality as the museum might consider of public interest from an artistic point of view, and the owners either already treated, or might be willing to treat, in greater or less measure as public exhibits. The foremost class of such objects would be works of art belonging to the municipality, commonwealth, or nation, which doubtless should all be inventoried, however unequal their artistic merit. In the case of objects privately owned, the museum would wish to proceed carefully and with the advice of the best organized opinion in the city on the various arts.

(2) The artistic and historical *study* of the specimens so scheduled, the accumulation of data about them and the artists, and the publication of results upon occasion. This study might lead at times to the recommendation of measures looking to the preservation of the scheduled objects and their utilization

as works of art.

(3) The management of the *exhibition* and exposition of registered objects to the public, either in place, or, in the case of movable objects, in the museum. The museum would undertake to aid the public in seeing registered objects intelligently by publishing lists or other accounts of them, organizing visits thereto, and in other ways; and in the case of works shown on private premises, to provide such protective means (custodians, etc.) as it would employ in its own galleries and grounds.

The visitation of public monuments as thus understood interferes with no existing agency for the promotion of art, but usefully supplements the work of all. Historical societies and unions for scenic preservation are founded in the interest of old association and natural beauty, not artistic quality. Schools and leagues of art, village improvement societies, municipal art commissions and national art associations are creative sources. What these achieve the museum will help to conserve

by making it known. The museum will be the means through which the country will take account and advantage of its enrichment in material products of the imagination.

Where data are already complete and the facilities of exhibition ample, the museum will need only to record the fact in its registers. Doubtless municipal and professional archives exist with whose aid a close copy of Independence Hall in Philadelphia could be constructed were the original destroyed; doubtless also the building is publicly shown and commented upon as fully as practicable. But what photographs, technical descriptions, or historical documents now represent the lost Hunt frescoes in the Albany Capitol? Do data exist, and where are they accessible, that would insure to those who have never seen David d'Angers' statue of Jefferson at the Capitol in Washington a proper estimate of that work? Do even sculptors generally know of its existence? Plainly the record of our public artistic riches, to say nothing of the private collections occasionally shown publicly, is fragmentary and inaccessible; and most of it, moreover, is unauthoritative. So it might remain, however far the schemes now on foot for the preservation of antiquities and scenery and for the promotion of art were to be developed. The place of visitor to public monuments is empty for the museums of the country to fill.

Five good results might be anticipated from the acceptance

by museums of this new duty.

(1) The museum would be connected with current artistic production permanently and healthily. Always on the watch for any new and important acquisition of the neighborhood, it would fully record the origin, character, and purpose of the work before any of the facts were forgotten. Becoming interpreter and advocate of living art, the museum would nourish but not pamper it by winning instead of granting it commissions.

(2) The museum would appear in its true light as purely an agency of conservation, offering asylum to waifs and strays of art, but equally interested in the security of works still in their places. Zeal to preserve artistic treasures within gallery walls does not permit indifference to the fate of others without. To have no eyes for the present is to impugn one's sense for the past, and, conversely, to concern one's self with art still alive is to deepen one's comprehension of its remains. A museum active on behalf of the monuments of its neighborhood acknowledges itself not the home but the refuge of the objects of art it shelters.

(3) Architecture, the third and chief of the material arts, would be brought within the circle of museum interests. Painting and sculpture alone (with their minor derivatives) can be represented in exhibition galleries by intact original works; architecture only by fragments or reproductions. A large share of the more important monuments of any neighborhood being works of architecture, the museum, by undertaking their registry and publicity, would complete its representation of the material arts. The architects on museum boards would find opportunities of service hitherto lacking.

Geology among the sciences presents on this point an analogy with architecture among the arts. By undertaking the registry and publicity of instructive natural features in their neighborhood, museums of science would for the first time represent

geology otherwise than by fragments and reproductions.

(4) The proposal adds to the present museum what might be called an out-door department. The Nordiska Museum in Stockholm has a park (Skansen) filled with examples of old Swedish architecture, which has been a successful adjunct to its in-door collections, and has found imitators. As visitor, a museum would give and call attention to outside objects without waiting for their withdrawal from use.

(5) The scheme would insure to the museum a permanent source of enrichment. A probable result of the registry and publicity of outside objects under museum auspices would be their frequent transfer to the museum for permanent enjoyment

by the public.

Finally, the plan should commend itself, first, to museums, because it offers the opportunity of a novel and important public service; second, to other owners of objects of art, because museum registry of a work would give it distinction, increase its influence, and safeguard its future; and third, to the people at large, because the museum would henceforth be their representative, alert to see that all interesting and accessible works of art in their neighborhood should be utilized for public benefit.

To similar ends let museums of science and of history add to their function of collecting, preserving, and exhibiting instructive or interesting objects, the office of recording, studying, and making known like objects in their neighborhood.



Museum of Fine Arts, Boston

PORTRAIT OF SAMUEL ADAMS
J. S. Copley (1737-1815)

Lent to the Museum by the City. The Colonial leader is represented addressing the British Governor of Massachusetts on the day after the Boston Massacre of 1770. He points to the Charter of Massachusetts on the table before him.

II. THE REGISTRY OF PUBLIC ART AT THE MUSEUM OF FINE ARTS, BOSTON

In the paper on "Museums and the Conservation of Monuments" read at the annual meeting of the American Association of Museums in Philadelphia, May 12, 1909, and reprinted above, it was proposed that each art museum in America should undertake to prepare and maintain an inventory of the works of art outside its walls which are interesting and accessible to its public and to promote the enjoyable and profitable study of them by all. In pursuance of this suggestion the Museum of Fine Arts in Boston, in the following October, announced its purpose to undertake such a registry in a circular addressed to a number of persons responsible as guardians or owners for important buildings, statues, pictures, and other works of art in public places in Boston, the list including representatives of the United States, state and city governments, colleges, and

religious and artistic organizations. The announcement was cordially received, the only doubt expressed by any of those replying being whether the objects in their keeping merited this recognition. The Museum was quite prepared to find that this doubt was justified in some cases and quite prepared as well to find it not justified in others. The pressure of work incident to opening the new Museum building in November prevented for a number of weeks any further active effort in establishing the Registry. The initial step in the realization of a purpose completely new to most people must consist largely in verbal ex-



Public Library, Boston

GOLD MEDAL PRESENTED TO GEORGE WASH-INGTON BY CONGRESS IN COMMEMORATION OF THE EVACUATION OF BOSTON.

P. S. B. du Vivier (1730-1819)

planations of the plan, and such explanations are very costly in time and trouble, demanding much correspondence and conversation. Within a few months active steps were taken to fulfil the design and a report upon the results reached was presented at the meeting of the Association in 1910.

The comments of the press were distinctly favorable. There seemed to be a general feeling of satisfaction, if not of relief, at the thought that a class of permanent institutions already devoted to the widest interests of the public should have espoused the cause of the people in this necessary particular. Three months after the meeting of the Association at which the plan was first proposed the "Museums Journal" of England, in reviewing a book on "The Care of Natural Monu-

ments" by the director of the Dantzig Museum, expressed its surprise that Dr. Conwentz made no mention of museums, among the agencies of their protection, continuing: "It certainly seems to us that the local museum of the district would form a very fitting headquarters for work of this character," and concluding: "Not to urge the point too far, the least suggestion we can make is that the officials of our museums should without delay get into touch with the nearest local association for the preservation of natural monuments." The same journal, in reviewing the "Proceedings" of the Association in the issue



Public Library, Boston

SILVER VASE PRESENTED BY CITIZENS OF BOSTON TO DANIEL WEBSTER IN RECOGNITION OF HIS DEFENCE OF THE CONSTITUTION, OCTOBER 12, 1835.

of March, 1910, refers to the plan of the museum registry of public art as in line with this recommendation of its own and heartily welcomes the suggestion, adding that "It may fall on more fruitful ground on the other side of the Atlantic, where museums have a more open field." In Germany the Kunstchronik of May 13th, 1910, spoke of the plan as an especially praiseworthy innovation in museum methods and went on to say: "It would be a real blessing if this novelty should be taken up also in other States of the Union." A private letter from Dr. Grosse, director of the Freiburg Museum, expressed his thorough-going sympathy with the proposal and the views on which it is based. The New York "Nation" spoke of the Registry as a new service "which might well be adopted by museums of all kinds. Like most new ideas this is a simple and obvious extension of the usual duties of a museum." This coincidence of favorable opinion is of good augury. It indicates that the proposed function of the Registry of Public Art may open to museums an opportunity of wide usefulness.

A circular of information lately issued makes known the work in the following words:

The Registry of Local Art of this Museum is a card index of works of sculpture, painting, architecture, and the minor arts accessible to the public of Boston and Massachusetts, with a file of related documents.

The purpose of this inventory is to keep the artistic inheritance of the people before the public mind. For this purpose an inventory is indispensable. The people must know what they have in order to give it due attention



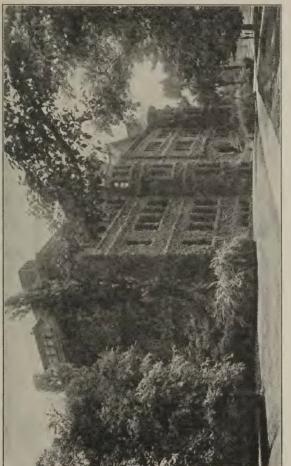
Faneuil Hall, Boston

Bust of John Adams, Second President of the United States

J. B. Binon (1818)

With the Washington medal, this bust is a memorial of the intimate relation between France and the United States at the beginning of our history.

At present no comprehensive inventory of the public art of our community exists. The materials for it either are lacking or are scattered in municipal histories, guide-books, exhibition catalogues and periodicals, or the records of boards, societies, and individuals. By offering a permanent, appropriate, and convenient place for the preservation of a descriptive list of works of art erected in public places or otherwise open to public view, the Registry of Local Art aims not to duplicate, but to supplement, the work of all organizations coöperating in the artistic adornment of our cities, or the public exhibition of fine art. It



SEVER Hall, Harvard Yard $H.\ H.\ Richardson\ (1838-86)$ The most commanding in effect, though not in size, of the College buildings.

hopes to be regarded as a section of their archives, in the sense of a progressive record of what they do to put means of artistic enjoyment within reach of the public generally.

It is designed to keep the Registry open to public use in the office of the Secretary of the Museum, and to record its progress in the Museum Bulletin.



Charlestown High School

Intaglio: "Girlhood"

Grace Hooper

The label reads:

Here
where her work was done
let this intaglio
bring to our memory
GRACE HOOPER
artist and teacher

Many memorial inscriptions, not always so musically expressed, are found in the Boston schools.

The Registry will be grateful for notice of any works of art or collections of art which are, or may become, accessible to the Massachusetts public, and will index and carefully preserve any information and documents sent.

The Registry will also compile, edit, and supervise the illustration of lists of works of art like those which it has for several years prepared at the request of the Art Commission of Boston as supplements to their reports. For this labor



Exedra with intaglio representing an Indian chief D . ()

Erected in memory of Francis Parkman (1823-1893), historian of Canada.

it would expect a compensation of five dollars a printed page and the travelling expenses incurred.

The methods of the work are very simple. A representative of the Museum calls by appointment at the public building, church or other place where there are objects to register and takes careful notes. These notes are supplemented later by further visits, by consultation of books in the Museum library or with officers of the Museum. They have sought to include as many as possible of the following data recorded as exactly and fully as possible:

Place of the object; owner; title (dates if a portrait); artist (with dates); description (including material, measurements, decorative elements, an interpretation of motives, a verbatim, literatim, and lineally correct transcription of any inscriptions or any signatures of artists, and references to related works of art or to literary sources); history (whether gift or commission; date and circumstances of erection; removals, restoration, and per-

sons concerned).

To supplement these notes it has often proved possible to obtain photographs of the objects or other documentary material. A set of measured drawings representing Park Street Church before the alterations of 1914 has been deposited with the Registry for safekeeping by the architects. Another set representing an architectural survey of the Old South Meeting House has been deposited by the Old South Association. A third set representing Saint Paul's Cathedral has been given to the Registry by the Boston Society of Architects.

The data gathered by the Registry are preserved in a triple card index and a file of folders referred to from the cards. Of the three cards written for each object, each contains the same three items of information, namely, the owner, the object, and the artist. On one, the name of the owner comes first, on another the name of the object, and on the third, the artist's name. The owner cards are arranged together in alphabetical order as an owner list; the object cards as an object list, and the artist cards as an artist list. These cards are three and seven-eighths inches high and five and seven-eighths inches long. The illustrations show the three cards devoted to one object.

The further data gathered about any object registered are preserved in a folder. The title of the folder is written on the owner card and underlined. A notice in the drawer containing the index directs the reader to look at the owner card of any object for the underlined reference to further data. The folders

Massachusetts, Commonwealth of State House, Boston: Grand Staircase Hall, Memorial to the Army Nurses of the Civil
War; by Bela L. Pratt. "State House", 1914, Page 45.
Army Nurses of the Civil War, Memorial to.

Army Murses of the Civil war, Memorial to:
by Bela L. Pratt.
See Massachusetts, Commonwealth of. State
House, Boston: Grand Staircase Hall.

	Pratt, Bela Lyon (1867-1917). See Massachusetts, Commonwealth of. State House, Boston: Grand Staircase Hall. Memorial to the army Nurses of the Civil War

are kept in the usual upright letter-filing drawers arranged

alphabetically according to their titles.

In case the Registry comes into possession of any list, written or printed, containing objects which it is desired to register, the list is filed in a folder and an owner card is made out with the title of the folder underlined. In case the objects in the list are of various ownership, the list is registered by its title on a card headed "Owners, Various." The entry on the owner card is then repeated on cards headed "Objects, Various," and "Artists, Various" (unless the objects are the work of one) in the object and artist index. Any important object in such a list may thereafter, when leisure offers, be given its own triple set of cards — owner, object, and artist — the owner card containing an underlined reference to the folder as on the general card.

Newspaper cuttings form an important source of information for the Registry. They are most conveniently filed in folders instead of a scrap-book. An owner card is made out with the title of the folder underlined; or, in the case of several owners, the reference is added to the card headed "Owners, Various."

Projects for artistic monuments are registered with references to the cuttings or other data about them as if they were already carried out, but with the word "Projected" added to the entry.

By these methods the Registry can inventory not only such objects as there may be time to inspect and record, but also in a collective way objects too numerous to register individually at the moment. A registry once brought up to date by these summary entries may be amplified and kept abreast of the current artistic development of its neighborhood without the devotion of more than occasional hours.

It has been the experience of the Boston Registry that full and authoritative data about a public work of art are very easy to obtain at the time of its installation. The recognition of the project by an important institution is welcome to all those engaged in it. Cordial relations between the museum and the artists concerned are a notable result. Although devoted by its immediate sphere to the art of the past, a museum, through this external function, comes into a wholesome relation to the art of the present.

It is also the Boston experience that full and authoritative data about works of art installed long ago in public places are hardly to be obtained by any inquiry. The scheme of items above outlined can only very partially be filled out for most older monuments. The memory of many facts has faded out, and such records as may have been made can no longer be unearthed. This experience is a valid argument for the establishment of Registries. With this forgetfulness about public monuments goes ignorance and neglect of them. A record of them will undoubtedly help them to accomplish their purpose of permanent public enjoyment and advantage.

Since the Registry was begun, Harvard College has completed an inventory of the works of art in its possession and has placed a copy with the Registry. The manuals of the State House, the Public Library, and pamphlets or lists compiled by a number of churches and other institutions, including the Boston Athe-

næum, are also contained in the Registry files.

The chief work of inspection and record has been carried out in the service of the Art Commission of the City, for which the Registry has prepared a series of lists of city-owned works of

art, at present complete.

On the basis of these various records, the Registry hopes in the near future to issue a Handbook of Public Art in and about Boston. The pamphlet would consist chiefly of illustrations, a few lines of text giving important facts about each. The worth that such handbooks might eventually come to possess for all greater cities is suggested by one of the paragraphs in Bishop Berkeley's "Querist": "Whether pictures and statues are not in fact so much treasure? And whether Rome and Florence would not be poor towns without them?" An illustrated review of public art at once apprizes us of what has been done and suggests what might still be done. In American communities, to whose life the imagination has not yet had opportunity to add its commentary, the second function may easily prove the more important one.

A Registrar is of the type of workman described negatively by Dr. Johnson as a "harmless drudge." Any one elsewhere who aspires to follow the Boston precedent must be prepared to find that others will commend his work in theory and yawn over it in practice. Yet the positive value that Dr. Johnson was too sensitive to claim for the labor of the lexicographer clearly belongs also to the minor field of the registry of public art. Let the Registrar remember that what he plants and waters is a tree of the most deliberate and uneventful growth whose full foliage only a later generation will take pleasure in and profit by.

OBSERVATIONS IN EUROPEAN MUSEUMS 1

The American visitor to one of the older museums in Europe meets an atmosphere that has never existed in museums at home. The earliest museums sprang out of the collector's impulse — that of safekeeping; those established after the World's Fair of 1851, out of the exhibitor's impulse — that of publicity. In 1840, the poet Southey justified bequeathing his collections for sale by the remark: "Put in a museum nobody sees them." 2 In 1912, the painter Detaille bequeathed his house and contents to the city of Paris to be made a museum.3 In the interval, museums had developed from storehouses to expositions. To the duty of conserving what is worth seeing, they had added that of getting it well seen. They no longer serve only the few, able to see for themselves; they serve also the many, unable to see without aid. Even the older museums have of late exchanged their mainly passive attitude toward the public for a more active rôle.

Under the pressure of the double responsibility of keeping and showing, museums have come to magnify their office. Their growth and their new public importance have led them to treat their buildings and the installations within as independent works of art. This tendency the future must correct. A clear distinction exists between the purpose to exhibit works of art installed in a building and the purpose to make works of art of the building and the installations. The essential purpose of a museum is the first. A museum building may be a monument of architecture and its installations achievements of decorative art only in so far as both are compatible with exhibiting to the best advantage the objects so sheltered and arranged. It is the servitor of objective art as other public buildings are not, and should express this difference of function in its design. Museums as expositions should become again the simple media for voices from the past which they once were

¹ Reprinted from the Proceedings of the American Association of Museums, vol. vii. (1913.)

² H. Crabb Robinson, Diary, vol. III, p. 187.

³ Press despatch, December, 1912.

as magazines; albeit with a care to be transparent media such as they never have been.

The present transitional stage is one of museum self-importance; the definitive stage one of self-forgetfulness. The future will surely approve of external and internal simplicity in a museum building. Age may mellow crudeness of surface and dignify plainness of line, but age will not restore to museum galleries light sacrificed to a facade, nor lessen the disharmony between decorations and contents different in spirit. The symmetrical architecture of one of the newest of European museums results in the same lighting and the same decorative forms in galleries of modern sculpture and of Egyptian antiquities. In two others, also built for their present purpose, the needs of the exterior have given the upper galleries windows reaching to the floor, but only partly to the ceiling, blinding the visitor and unnaturally lighting the objects. In the study of newer collections generally, obtrusive gallery decoration is something to fight against. The gratuitous burden of color and form in walls. floor, and ceiling has its share in the fatigue of a museum visit. By comparison, the reserve of an old palace like the Brera is an immense relief.

The future will surely approve also the arrangement of objects to enhance their individual effect instead of their collective effect. Museum acquisitions are commonly fragments, designed for other companion pieces than their chance associates in museum galleries. The attempt to combine them cleverly into a decorative scheme stands on the artistic level of an oldtime crazy-quilt. The future belongs not to the panoramic but the anthologic conception of both museum arrangement and museum visiting. Each of the artistic fragments preserved in a museum gallery has its individual aim, and it is for the unveiling of these aims to the after-world as an anthology of art that they are permanently shown. Reviewing them panoramically by a passing glance soon surfeits; and as a form of recreation or improvement in no way warrants the expenditure now devoted to museum acquisitions and their display. The separate inspection of museum objects for the individual content of each does repay, and fully, for all that our museums cost to establish and maintain; but this anthologic visiting the panoramic arrangement defeats. Cases symmetrically placed but shadowing each other, exhibits pieced out with inferior examples or with reproductions, backgrounds varying from room to room without corresponding enhancement of the contents, represent some of the costly ways in which even the newest museums maintain the panoramic ideal.

If not designed to keep up interest in a panorama of rooms, the perpetual variety of wall coloring, found in many newer museums, would appear uncalled for on any grounds. There is one tone of color, a light gray-brown or dull vellow-gray which both experience and reason approve for many if not most museum purposes. Professor Möbius has proposed it as a standard. A creamy gray is favorably noted in the report of the commission sent to Europe by the Museum of Fine Arts in Boston, as the color often given the walls of his interiors by Peter de Hooch.² The choice of dull grav-brown for the walls of the Vestibule Room (I) of the National Gallery made that apartment to me the most agreeable in general tone among all those seen last summer. The fact that gold is the accepted frame for our pictures argues for the use of dull vellow-gray as a general background. For this tone of color may be regarded as derived from gold by such a darkening and dulling as would balance the greater extent of surface covered. A like general tone is illustrated in rough plaster or common burlaps and could on that account be adopted experimentally through a whole museum at less cost than any other. Both these materials possess also the fine structure or play of light and shade which makes the carving or graining of a frame a congenial setting for the intricacies of a work of art.

Once free from the monumental ideal without and the panoramic ideal within, modern museums would become the servitors of their contents which they were founded to be; but they would still be far from efficient servitors. They would be media for voices from the past, but not transparent media without changes obviously necessary in their methods of lighting, of giving information about their exhibits, and of aiding the visitor in other ways.

A museum is a place for the use of the eyes. The word "visitor" derives from the visual powers, and their economy is a

¹ Karl Möbius, "Die Zweckmässige Einrichtung grosser Museen," *Deutsche Rundschau*, vol. 68 (1891), p. 356. "Dull gray-yellow has the advantage over a white background that it is not blinding, does not tire the eye by reflecting light too strongly. It differs from a red, bright yellow, green, blue, violet or black background in that it does not produce any colored after images, any train of complementary tints in the eye to disturb the pure and full perception of the exhibited objects."

 $^{^2}$ Museum of Fine Arts, Boston, Communications to the Trustees, vol. III (1905), p. 54.

prime desideratum of museum methods. At present they are lavishly wasted. Light is often provided in right quantity, but generally also in wrong direction. Yet direction and not quantity of light is the chief element in good seeing. The eye is most sensitive to form and color under a moderate illumination only. Woods in the rain are full of gradations unnoted in sunshine. But if just dazzled by a burst of sun, the eve will not perceive them. The visitor to modern galleries is at frequent intervals dazzled by glares of light, now from the ceiling, now from windows, and now reflected from the surface of pictures or the glass of cases. Much of the illumination is directed upon himself instead of upon the objects. Could the resulting ocular anæsthesias be forestalled, his seeing powers would be greatly increased, one is inclined to say multiplied. In a measure glare can be provided against by curtaining the light-openings, by making ceiling lights narrower or higher, and by raising the sills of windows. Of the latter expedient it does not appear that adequate advantage has vet been taken. A window restricted to the upper third of the wall of a gallery of ordinary dimensions would not be directly in the visitor's eyes unless he looked toward it from the centre of the room or beyond; nor be reflected into them excepting from the upper part of large pictures and cases against the opposite wall. Sculpture, pictures of moderate size, and works of minor art will be well lighted both on this and the window wall, where the milder light would still suffice for eves undazzled by the window above. On the end walls of the room works of art of any kind or size would show to better advantage than in any part of a top-lighted gallery. The light would fall at an angle approaching forty-five degrees both with the perpendicular and with the line of vision of the spectator. - the general direction called by Leonardo the best for all objects. Further, instead of the even mediocrity of illumina-

¹ Leonardo da Vinci, Libro della Pittura.

Cap. 85. In drawing from nature "the height of the light should be such that objects will cast shadows equal to their height." (Forty-five degrees in elevation.)

Cap. 415. "Where should one stand to look at a picture? Assuming that AB is the picture, the light coming from D; I say that a person placing himself between C and E will grasp it very badly, B. and especially if it is an oil painting or varnished to have some lustre like a mirror. It will be less visible on this account the nearer the eye approaches C, where the rays are reflected coming from the window. If a person places him-

self between E and D, he will see the picture well, and the better the nearer he is to D, because this position shares less in reflected rays." (Forty-five degrees or less with the line of vision of the spectator.)

tion afforded by top light, the end, window, and opposite walls of a high side-lighted gallery would each have its individual lighting. Gradations of prominence in installation, which the contents of most galleries call for, would be possible. The interior porticoes of the Naples Museum, now walled up as galleries of sculpture, instance the agreeable and favorable effect of very high side lighting; but in most side-lighted galleries, new and old, the windows run well into the lower half of the wall and, unless curtained, leave the visitor no eyes for anything else.

Information about exhibits in museums is chiefly given in the form of inscriptions affixed to them, or labels. Two facts about museum labels indicate the limitations of their use. First, a placard affixed to a work of art, while it may be an aid to ignorance, may also be a hindrance to the enjoyment of the work by one who comes prepared. Second, the information given on labels is apt not to be germane to the artistic content of the object labelled. Some form of printed information is called for which shall neither stand in the way of the spectator when instructed, nor lead the thoughts of the uninstructed away from the work. The rigid subordination of labels and the exclusion therefrom of irrelevant information is an essential factor in training the visitor to study the objects themselves — the purpose for which a museum is established.

The problem of the form of labels offers no difficulty in the case of pictures and sculptures, where the frame and the pedestal provide appropriate places, at once connected and subordinate, for an inscription. In the National Gallery and elsewhere in England the names of artist and subject are painted along the frame below and immediately next the canvas, and upon occasion the source on the corresponding upper margin. It is particularly desirable that the names of givers or lenders should have, as by this practice, a separate place from the label proper. This both emphasizes such data and enables the visitor to ignore them if he choose. At the National Gallery one always knows where to look for both kinds of information, and neither is noticeable at the ordinary distance of seeing, although a step makes the words legible. The pedestals of sculptures are open to labelling in a way equally orderly and no less inconspicuous and effective.

The real physical difficulties of labelling begin with the minor arts. It is in the first place admittedly impracticable in a col-

Cap. 104. "On the quality of illumination." "A large volume of high light not too brilliant is that which renders the details of objects most pleasing."

lection of smaller things to give a label to every object needing one. The application of a separate inscription to every individual exhibit whose proper comprehension will be impossible to most people without special information is in many cases completely destructive of the effect of all as works of art. For the most part the attempt is abandoned in European museums, many of the richest exhibits of textiles, metal-work and woodwork containing only an occasional label. The problem, as at present conceived, must and evidently does present insuperable difficulties. It is time to attack it at some other angle. Commercial show windows enforce a similar lesson. The cheap and mean appearance of the shops on Regent Street, Bond Street, and Piccadilly compared with those on the Rue de la Paix or Fifth Avenue is due in great measure to the immoderate labelling of objects in London, not only with prices but with other information, and their scanty placarding in Paris and New York. The profusion of printed cards is convenient but also unmannerly. The shops of the chief dealers in works of art are a marked exception, and museums should heed this testimony of business experience combined with good taste.

In the second place, a label on any small object is necessarily either obtrusive or difficult to read. Common practice inclines to the latter fault, with the result that if the visitor to exhibits of minor art exerts himself to read labels, he is soon too fatigued in body and eyes to observe the objects adequately. My notebooks of last summer often contain the remark: "Labels illegible."

The problem of composing labels is a difficult one for the major and minor arts alike. Printed information on objects which shall answer the uninformed spectator's chief questions without uselessly occupying his thoughts or forcing them into other than artistic channels is still in the main a desideratum of museum economy. As commonly composed for pictures, labels act perceptibly to lower the élan with which the eyes search the canvas for new conceptions and for points of attachment in memory, interposing a rush of abstract historical ideas and even indifferent registration data between the visitor's perception and the artist's intention. It is especially undesirable that they should be filled as they frequently are in Europe with

¹ In the Tokio Museum the little collection of netsuke consists principally, for the eye, of white labels which tell in two languages and under many prescribed heads very little and mostly the self-evident; while the miniature sculptures, often of the most fascinating kind, almost disappear in comparison." Curt Glaser, Ostasiatische Kunstmuseen, Museumskunde, vol. viii, 3 (1912), p. 148.

self-evident information. To be halted in the inspection of a landscape to learn that it represents "Cottage with Covered Haystack by a River," "Forest Scene," "View over a Flat, Wooded Country" (one of many sequences noted) is to have one's vision remanded to nursery conditions. Again, in a collection of Eastern art the first half of the label, "Reliures Orientales xvi-xviii Siècles" unnecessarily occupies the visitor's mind and eyes. The objects are patently book-bindings and the collection wholly oriental. In another collection an object is carefully labelled "Small Bronze Horse"; the facts that it is small, of bronze, and a horse being already plain. An important indirect advantage of a label is that it provides a name by which to call a work of art. This advantage is missed when the name is such as could be invented forthwith by any one who remembered the object at all.

For objects of minor art there seems no alternative generally applicable, owing to the two physical difficulties just mentioned, other than to employ collective labels giving a general description of a whole class of exhibits. Such signs could be composed to answer the essential questions of visitors; and a legible number, which it is always possible to affix to any object however small, might refer to a list or catalogue which should be duly advertised and made accessible. As matters now stand, the visitor looking through an exhibit of minor art for what may chance to interest him is often, perhaps generally, disappointed when he seeks a label on the object of his choice. Such collective signs, unobtrusively placed high on a wall or on the frame of a case, are not infrequent at present in European museums and were to me always welcome. But because their use is not made a system, they still betray the prevailing vice of labels — that of getting themselves forgotten and becoming out of date. In one important new gallery, immediately under the sign "Indian and Persian Cashmeres" the principal one of three objects was labelled "Mortlake Tapestry, England, 18th century." What was the uninstructed visitor to think?

A collective label applied to the contents of a whole gallery becomes the designation of the room. Such gallery names are frequently found both on the Continent and in England, and one inclines to recommend their invariable use. They are often inscribed high on the wall, but for purposes of experiment might be painted on boards. If the design and lettering of such boards were carefully chosen and given a certain uniformity throughout a museum, they might become a permanent form of gallery

sign, adapted to changing exhibitions as well. The upper part of a gallery wall is nearly always vacant, and offers for every form of exhibit a place analogous to that afforded for individual pictures and statues by the frame and pedestal. To such a position, connected and yet subordinate, printed information about museum objects should always be relegated. Placed high on a wall, the visitor already informed ignores it without effort, and the uninformed obtains it by only raising his eyes. This habit is quickly acquired when the device is found everywhere. The systematic use of high wall signs would, I believe, go far to solve the problem of labels in museum galleries.

Among other aids to visitors, plans of the building are distributed about several English museums. In some cases they outline the department, and are hung on the jambs of doors like the doorway plans adopted at the Museum of Fine Arts in Boston, but one misses the gold star which in our plans tells the

visitor just where he is at the time.

The opportunity to sit down occasionally may be said to double the productiveness of a museum visit. Without it one is unable during the latter part of a visit extending over hours to give the proper attention to works of art, to say nothing of enjoying them, while, if time be taken for two or three short rests, the last hour may be as agreeable and profitable as the first. Seats should be used to forestall, not recover from fatigue, and should be so scattered as to make this possible everywhere in the museum. They are often provided abroad, and sometimes in greater number than necessary. Even in galleries full of visitors and containing comparatively few seats, some were always to be found vacant. The long gallery of the Louvre was the only exception noted. The elaborate upholstered divans frequently provided in Europe, beside being unattractive, offer an unnecessary amount of ease. Plain chairs or benches are more common, and care is often taken to give them the same color as the other woodwork of the room. Chairs are arranged in groups along the centre of the gallery without apparently being much displaced. At the Brera they are of antique pattern in the form of a curving "X" and are very pleasing in effect. Chairs of such a design would be a harmonious note in any gallery of European art. In the Elgin Room at the British Museum, plain oak benches are in no discord with the marbles about, and for purposes of forestalling fatigue are ample.

To the tourist from the Museum of Fine Arts in Boston, the opportunity of personally meeting representatives of foreign

galleries, like that offered by our docent service and conferences. is conspicuous by its absence. Within the past two years guides at stated times make the rounds of departments of the British Museum and, to judge by a similar service in Canterbury and other cathedrals, render a real and great service to visitors. At the Musée Guimet the conferences announced were without exception devoted to subjects and not to objects. Yet it is objects that visitors to museums come to see, and would be glad to hear about. Standing at the threshold of the immense treasury of the Louvre, and conscious of one's impotence to appropriate more than the merest crumbs of such a feast, nothing less than a perpetual series of conferences every hour and every day that the Museum was open seemed adequate to the requirements of its throngs of visitors. A corps of many men of culture and education would be needed, going far beyond the personnel of the Museum, and the larger the better. Instead of the works themselves, lantern reproductions and plaster casts might be used by the speakers for the purposes of comment in a lecture room, to be applied forthwith by the hearers to the originals in the galleries. In view of the start we have made in America at offering museum visitors the personal companionship of trained men, it seems not too much to anticipate that groups of scholars may before long be found everywhere combining in these ways to make the wealth of our museums the real property of contemporary society and a vital force in its life.

